







CITY OF GLENDALE WATER RATE COST OF SERVICE UPDATE 2014

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TABLE OF CONTENTS

SECTION 1: BACKGROUND AND OBJECTIVES	1
Background	1
Rate Study Objectives	1
SECTION 2: WATER UTILITY OVERVIEW	3
Water System	3
Water Supply	3
Current Water Rates	4
Potable Water	4
Water Adjustment Charges (WAC)	5
Current Recycled Water Rates	7
Current Private Fire Line Rates	7
Water Consumption	8
Customers and Usage by Category	9
Meter Equivalents	10
Financial Overview	13
SECTION 3: LEGAL REQUIREMENTS & RATE METHODOLOGY	14
Constitutional Rate Requirements	14
Article 10, Section 2	14
Article 13D, Section 6	14
Rate-Setting Methodology	15
SECTION 4: FINANCIAL PROJECTIONS & REVENUE REQUIREMENTS	18
Water Fund Reserves	18
Outstanding Debt	18
Ongoing Operating Cost Inflation	19
MWD Water Purchases	21
Capital Improvement Program	21
Projected Future Growth	22
Water Enterprise Financial Projections	22
Cash Flow Projection	23
Future Conservation and Price Elasticity	25

SECTION 4: COST OF SERVICE	27
Fixed vs. Variable Charges	27
Current Revenue Allocations	28
Base-Extra Capacity Cost Allocation	29
Allocation of Costs to Functional Cost Components	30
Allocation of Costs to Customer Categories	33
Peaking Factors	34
Revenue Recovery by Customer Category	36
SECTION 5: RATE DESIGN	38
Rate Development Principles	
Fixed Customer Charge	
Potable Water Fixed Customer Charges	
Recycled Water Fixed Customer Charges	40
Private Fire Line Customer Charges	41
Variable Charge	43
2012 Residential Tiered Rates	43
Revised Single Family Residential Variable Charge	44
Revised Multi-Family Residential Variable Charge	46
Commercial and Irrigation	47
Recycled Water	48
Private Fire Line	48
Variable Rate Calculations	48
Residential Tiered Rate Development	49
Water Adjustment Charges	53
SECTION 6: PROPOSED RATES & IMPACTS	54
Base Scenario: Proposed Water Rates	54
Base Scenario: Water Bill Impacts	57
SECTION 7: DROUGHT RATES	64
Drought Rate Background	
Water Conservation Plan	
2009 Water Shortage	65
Base Scenario: Proposed Drought Rates	

SECTION 8: RATE SCENARIOS	69
SECTION 9: RATE SCENARIO #2	72
Scenario #2: Proposed Rates	74
Scenario #2: Water Bill Impacts	78
Scenario #2: Proposed Drought Rates	83
SECTION 10: RATE SCENARIO #3	87
Scenario #3: Proposed Rates	89
Scenario #3: Water Bill Impacts	93
Scenario #3: Proposed Drought Rates	98
SECTION 11: RATE SCENARIO #4	102
Scenario #4: Proposed Rates	104
Scenario #4: Water Rate Impacts	108
Scenario #4: Proposed Drought Rates	113
SECTION 12: RATE SCENARIO #5	117
Scenario #5: Proposed Rates	119
Scenario #5: Water Rate Impacts	123
Scenario #5: Proposed Drought Rates	128
SECTION 13: RATE SCENARIO #6	132
Scenario #6: Proposed Rates	134
Scenario #6: Water Rate Impacts	138
Scenario #6: Proposed Drought Rates	143

LIST OF TABLES

Table 1. Water Supply	4
Table 2. Current Water Rates	6
Table 3. Current Recycled Water Rates	7
Table 4. Current Private Fire Line Rates	8
Table 5. Total Annual Water Consumption	8
Table 6. Current Water Accounts	9
Table 7. 2012/13 Total Water Consumption – Includes Potable and Recycled Water	10
Table 8. Meter Equivalents	12
Table 9. Beginning Cash Balances	18
Table 10. Operating Expenses	20
Table 11. Capital Improvement Program	22
Table 12. Base Scenario: Cash Flow Projection	24
Table 13. Price Elasticity Assumptions	26
Table 14. Projected 2013/14 Revenues and Fixed vs. Variable Recovery Allocation	29
Table 15. Allocation of Expenses	32
Table 16. Base Scenario: Annual Revenue Requirements Allocation by Cost Component	33
Table 17. Average (Base) and Peak (Max) Ratios by Customer Category	35
Table 18. Base Scenario: Allocation of Base and Max Day Costs	36
Table 19. Base Scenario: Potable Water - Fixed Charge Calculation	40
Table 20. Fire Protection Allocation between Public and Private Fire	41
Table 21. Base Scenario: Private Fire Line – Fixed Charge Calculation	43
Table 22. Current and Proposed Single Family Residential Tiers	45
Table 23. Current and Proposed Multi-Family Residential Tiers	47
Table 24. Residential Base + Max Tiered Cost Allocation	50
Table 25. Base Scenario: Variable Charge Calculation	52
Table 26. Base Scenario: Proposed Potable Water Rates	55
Table 27. Base Scenario: Proposed Recycled Water Rates	56
Table 28. Base Scenario: Proposed Private Fire Line Rates	57
Table 29. Base Scenario: Sample Single Family Bill Impacts	59

Table 30.	Base Scenarios: Sample Multi-Family Bill Impacts	60
Table 31.	Base Scenario: Sample Commercial Bill Impacts	61
Table 32.	Base Scenario: Sample Commercial with Fire Line Bill Impacts	62
Table 33.	Base Scenario: Sample Irrigation Bill Impacts	63
Table 34.	Base Scenario: Drought Rates - Projected Reduced Consumption Based on 2014/15	
Consump	tion	66
Table 35.	Base Scenario: Drought Rates - Projected Reduced Revenues Based on Reduced	
Consump	tion	67
Table 36.	Base Scenario: Projected Drought Rates for 2014/15	68
Table 37.	Scenario #2: No Rate Adjustments – Cash Flow Projection	73
Table 38.	Scenario #2: Proposed Potable Water Rates	75
Table 39.	Scenario #2: Proposed Recycled Water Rates	76
Table 40.	Scenario #2: Proposed Private Fire Line Rates	77
Table 41.	Scenario #2: Sample Single Family Bill Impacts	79
Table 42.	Scenario #2: Sample Multi-Family Bill Impacts	80
Table 43.	Scenario #2: Sample Commercial Bill Impacts	81
Table 44.	Scenario #2: Sample Commercial with Fire Line Bill Impacts	82
Table 45.	Scenario #2: Sample Irrigation Bill Impacts	83
Table 46.	Scenario #2: Drought Rates - Projected Reduced Consumption Based on 2014/15	
Consump	tion	84
Table 47.	Scenario #2: Drought Rates - Projected Reduced Revenues Based on Reduced	
Consump	tion	85
Table 48.	Scenario #2: Projected Drought Rates for 2014/15	86
Table 49.	Scenario #3: 5-2-2-2 – Cash Flow Projection	88
Table 50.	Scenario #3: Proposed Potable Water Rates	90
Table 51.	Scenario #3: Proposed Recycled Water Rates	91
Table 52.	Scenario #3: Proposed Private Fire Line Rates	92
Table 53.	Scenario #3: Sample Single Family Bill Impacts	94
Table 54.	Scenario #3: Sample Multi-Family Bill Impacts	95

Table 55. Scenario #3: Sample Commercial Bill Impacts	96
Table 56. Scenario #3: Sample Commercial with Fire Line Bill Impacts	97
Table 57. Scenario #3: Sample Irrigation Bill Impacts	98
Table 58. Scenario #3: Drought Rates - Projected Reduced Consumption Based on 2014/15	
Consumption	99
Table 59. Scenario #3: Drought Rates - Projected Reduced Revenues Based on Reduced	
Consumption	. 100
Table 60. Scenario #3: Projected Drought Rates for 2014/15	. 101
Table 61. Scenario #4: 5-4-3 – Cash Flow Projection	. 103
Table 62. Scenario #4: Proposed Potable Water Rates	. 105
Table 63. Scenario #4: Proposed Recycled Water Rates	. 106
Table 64. Scenario #4: Proposed Private Fire Line Rates	. 107
Table 65. Scenario #4 - Sample Single Family Bill Impacts	. 109
Table 66. Scenario #4 - Sample Multi-Family Bill Impacts	. 110
Table 67. Scenario #4 - Sample Commercial Bill Impacts	. 111
Table 68. Scenario #4 - Sample Commercial with Fire Line Bill Impacts	. 112
Table 69. Scenario #4 - Sample Irrigation Bill Impacts	. 113
Table 70. Scenario #4: Drought Rates - Projected Reduced Consumption Based on 2014/15	
Consumption	. 114
Table 71. Scenario #4: Drought Rates - Projected Reduced Revenues Based on Reduced	
Consumption	. 115
Table 72. Scenario #4: Projected Drought Rates for 2014/15	. 116
Table 73. Scenario #5: 4-4-4-4 – Cash Flow Projection	. 118
Table 74. Scenario #5: Proposed Potable Water Rates	. 120
Table 75. Scenario #5: Proposed Recycled Water Rates	. 121
Table 76. Scenario #5: Proposed Private Fire Line Rates	. 122
Table 77. Scenario #5 - Sample Single Family Bill Impacts	. 124
Table 78. Scenario #5 - Sample Multi-Family Bill Impacts	. 125
Table 79. Scenario #5 - Sample Commercial Bill Impacts	. 126

Table 80. Scenario #5 - Sample Commercial with Fire Line Bill Impacts	127
Table 81. Scenario #5 - Sample Irrigation Bill Impacts	128
Table 82. Scenario #5: Drought Rates - Projected Reduced Consumption Based on 2014/15)
Consumption	129
Table 83. Scenario #5: Drought Rates - Projected Reduced Revenues Based on Reduced	
Consumption	130
Table 84. Scenario #5: Projected Drought Rates for 2014/15	131
Table 85. Scenario #6: 5-4-4-4 – Cash Flow Projection	133
Table 86. Scenario #6: Proposed Potable Water Rates	135
Table 87. Scenario #6: Proposed Recycled Water Rates	136
Table 88. Scenario #6: Proposed Private Fire Line Rates	137
Table 89. Scenario #6 - Sample Single Family Bill Impacts	139
Table 90. Scenario #6 - Sample Multi-Family Bill Impacts	140
Table 91. Scenario #6 - Sample Commercial Bill Impacts	141
Table 92. Scenario #6 - Sample Commercial with Fire Line Bill Impacts	142
Table 93. Scenario #6 - Sample Irrigation Bill Impacts	143
Table 94. Scenario #6: Drought Rates - Projected Reduced Consumption Based on 2014/15)
Consumption	144
Table 95. Scenario #6: Drought Rates - Projected Reduced Revenues Based on Reduced	
Consumption	145
Table 06 Sconario #6: Projected Drought Pates for 2014/15	1/6

LIST OF ACRONYMS & ABBREVIATED TERMS

AF: Acre feet

AWWA: American Water Works Association

BWA: Bartle Wells Associates

City: City of Glendale/Glendale Water and Power

CPI: Consumer Price Index

CPUC: California Public Utility Commission

CUWCC: California Urban Water Conservation Council

GWP: City of Glendale/Glendale Water and Power

Gpm: Gallon per minute

HCF: Hundred cubic feet (equivalent to 748 gallons)

MG: Million gallons

MGD: Million gallons per day

Proposition 218: California Constitution Article XIII C

2012 Study: 2012 Water Rate Study

LIST OF DEFINITIONS

Base Costs: expenses that vary with water use under average demand conditions. Represent the costs that would be incurred if water consumption occurred evenly from day to day and from hour to hour, so that the system did not need extra capacity to meet peak period demands.

Max/Extra Capacity: expenditures incurred to meet water demands that exceed average (base) levels of use by system customers.

Peak Ratio/Factor: ratio of maximum flow to the average daily flow.

SECTION 1: BACKGROUND AND OBJECTIVES

Background

The City of Glendale Water and Power (City or GWP) provides water service to a population of approximately 192,000 in an area encompassing roughly 31 square miles. Located at the eastern end of the San Fernando Valley, Glendale is the third largest full service city in Los Angeles County.

The City purchases approximately 64 percent of its water supply from the Metropolitan Water District (MWD). The City also relies on groundwater pumped from local wells and recycled water as additional water sources, accounting for 30 and 6 percent, respectively, of the total water supply.

GWP operates as a self-supporting enterprise fund. Revenues are derived primarily from water service charges and must be adequate to fund the water system's operating and capital programs.

Rate Study Objectives

The City completed a cost of service study in 2012 which adopted four years of rate increases through January 1, 2015. In 2013, City staff discovered that the adopted water rates were not generating the anticipated revenue as projected in the 2012 Water Rate Study ("2012 Study"). In 2013, the City retained Bartle Wells Associates (BWA) to review the 2012 Study and rate model and to develop multi-year water rate adjustments to restore long-term financial stability. Key goals and objectives of this study include developing water rates that:

- Recover the costs of providing water service, including operating, capital, and water supply funding needs;
- Are fair and equitable to all customers;
- Are easy to understand and implement;
- Provide conservation incentive through pricing;
- Comply with the substantive requirements of the California Constitution, Article 13D, Section 6 (established by Proposition 218) and the general mandate of Article 10, Section 2;
- Support GWP's long-term operational and financial stability.

BWA thoroughly reviewed the prior rate study and rate model developed by Willdan Financial Services. The current fiscal year 2013/14 and the GWP's Five-Year Plan are used as the basis for

future projections through 2018/19. This 2014 study incorporates American Water Works Association (AWWA) recommended methodologies tailored to meet the City's unique characteristics and develops water rates that proportionately allocate the cost of providing water service to each customer.

This report summarizes findings and recommendations and develops water rate projections for the next five years. The proposed water rates include both a) overall rate increases needed to fund the water utility's costs of providing service as well as b) modifications to the rate structure designed to fairly apportion costs to all customers and achieve City objectives. Final recommendations were developed with substantial input from City staff. The full set of tables developing the financial projections and rate recommendations are included in the appendix to this report.

SECTION 2: WATER UTILITY OVERVIEW

Water System

The City currently has approximately 34,500 potable and recycled water meters and fire line services within a service area of 31 square miles. The potable water system consists of 397 miles of water mains, 28 pumping stations, and 30 reservoirs and tanks. It also includes two treatment plants – the Verdugo Park Water Treatment Plant and the Glendale Water Treatment Plant – to treat groundwater.

The service area is divided into seven pressure zones from the 724 foot elevation to the 2,483 foot elevation. Because of this wide variation in service elevations, pumping stations are needed to lift water from the lower zone to the next higher elevation.

GWP also owns and operates a recycled water system. The system comprises 22 miles of pipe, six pumping stations, and five storage facilities. Approximately 1,600 acre-feet of recycled water are delivered annually to meet mostly irrigation demands. The source of recycled water is the Los Angeles-Glendale Water Reclamation Plant. The plant is jointly owned and operated by the City of Los Angeles and the City of Glendale. Production from the plant is approximately 17,000 acre-feet annually and is used as recycled water, with the balance discharged to the Los Angeles River.

Water Supply

The City obtains approximately 30 percent of its potable water from water rights in its wells in the San Fernando and Verdugo groundwater basins and approximately 6% from recycled water. The remainder is imported water obtained from the Metropolitan Water District. In 2012/13, the water system pumped or purchased a total of 29,303 acre-feet (AF) of water. Approximately 10,500 AF, or approximately 36 percent was sourced from local groundwater basins and recycled water and approximately 18,700 AF or 64 percent was purchased from MWD. An acre—foot of water is the amount of water required to cover one acre of area to a depth of one foot (one AF equals 325,850 gallons). Table 1 shows a history and projection of water supply.

Table 1. Water Supply

	Actual				Projected				
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
ACRE-FEET (AF)									
Groundwater	8,730	9,416	8,666	8,721	9,027	9,027	9,027	9,027	9,027
MWD	16,998	17,320	18,761	18,349	19,221	19,317	19,414	19,511	19,608
Recycled Water	<u>1,445</u>	<u>1,462</u>	1,877	<u>1,730</u>	1,608	1,624	<u>1,640</u>	<u>1,656</u>	1,673
Total	27,173	28,198	29,303	28,800	29,855	29,967	30,081	30,194	30,308
PERCENT OF TOTAL									
Groundwater	32.1%	33.4%	29.6%	30.3%	30.2%	30.1%	30.0%	29.9%	29.8%
MWD	62.6%	61.4%	64.0%	63.7%	64.4%	64.5%	64.5%	64.6%	64.7%
Recycled Water	5.3%	5.2%	6.4%	6.0%	5.4%	5.4%	5.5%	<u>5.5%</u>	5.5%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Current Water Rates

Potable Water

The majority residential small customers are billed on a bi-monthly basis. Most commercial and large residential, irrigation, and municipal accounts are billed monthly. The current water rates include three components:

- 1. A fixed customer charge that varies based on meter size and is levied regardless of water consumption. This basic service charge recognizes the fact that even when a customer does not use any water, the City incurs a substantial amount of costs ensuring that water is available at all times to meet the instantaneous needs of customers. The fixed customer charge varies by meter size and capacity, with larger meters paying higher charges based on the increased capacity and latent demand placed on the water system associated with each meter size. All customers, residential and non-residential, are charged the same customer charge.
- 2. A **variable charge** billed per each hundred cubic feet (hcf) of metered water use. A hundred cubic feet (hcf) of water is equal to 748 gallons of water. This charge is levied on actual water use and recovers variable costs of providing water service as well as portion of fixed costs allocated to volumetric cost recovery.

Single family residential customers are billed according to a five-tiered inclining rate structure with water purchased first in Tier 1 and then subsequently in higher tiers as water use increases. Multi-family residential customers are billed according to a three-tiered inclining rate structure. The tier breakpoints for multi-family customers are

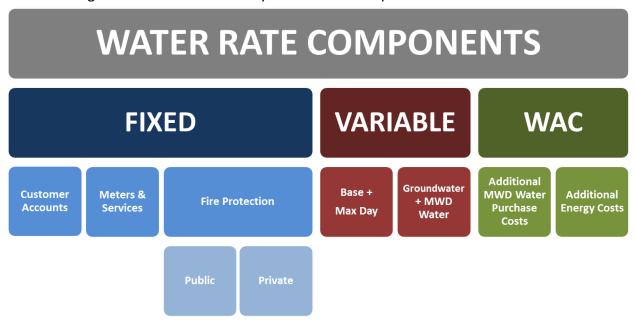
prorated based on the number of dwelling units for each account. Commercial and irrigation customers pay a uniform rate for each unit of metered water use.

3. Water Adjustment Charges (WAC)

The City also levies a water adjustment charge (WAC) to recover any additional costs of water purchases and energy costs that exceed the budget. The WAC is calculated twice a year and becomes effective the first day of January and July of each year. The WAC can either increase or decrease semi-annually and is based on the cost of purchased water from MWD and the cost of purchased energy for the previous six months.

For single family residential customers, the WAC is billed per each hcf of metered water in Tiers 3 through 5. For multi-family customers, the WAC is applied to Tiers 2 and 3. The WAC is applied to all commercial and irrigation consumption, including recycled water customers.

The following chart summarizes the City's water rate components:



The current potable water rates are shown on Table 2:

Table 2. Current Water Rates

MONTHLY WATER CUSTOMER CHARGE FOR ALL CUSTOMERS							
Meter Size	Dec 15, 2010	Meter Size	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014		
5/8"	\$15.6583	5/8"	\$18.73	\$19.61	\$21.18		
3/4"	\$15.6583	3/4"	\$21.97	\$23.01	\$24.83		
1.0"	\$15.6583	1.0"	\$28.46	\$29.79	\$32.15		
1.5"	\$27.5280	1.5"	\$44.68	\$46.75	\$50.43		
2.0"	\$44.6974	2.0"	\$64.15	\$67.11	\$72.38		
3.0"	\$68.6557	3.0"	\$109.57	\$114.60	\$123.58		
4.0"	\$116.7257	4.0"	\$174.46	\$182.45	\$196.72		
6.0"	\$185.3376	6.0"	\$336.67	\$352.07	\$379.59		
8.0"	\$297.2235	8.0"	\$531.34	\$555.61	\$599.02		
10.0"	\$425.4466	10.0"	\$758.44	\$793.08	\$855.03		
12.0"	\$595.6296	12.0"	-	-	-		

	MONTHLY VARIABLE CHARGES					
		SINGLE FAMILY RES	IDENTIAL			
	Dec 15, 2010		Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	
Delivery Charge		Variable Charge				
Tier 1: 0 - 10 hcf	\$0.8399	Tier 1: 0 - 6.26 hcf	\$1.52	\$1.59	\$1.72	
Tier 2: Over 10 hcf	\$1.8063	Tier 2: 6.27 - 12.52 hcf	\$1.89	\$2.00	\$2.18	
		Tier 3: 12.53 - 31.03 hcf	\$3.02	\$3.08	\$3.18	
		Tier 4: 31.04 - 40.28 hcf	\$3.35	\$3.41	\$3.54	
		Tier 5: Over 40.28 hcf	\$3.85	\$3.95	\$4.13	
Water Adjustable Charge	_	Water Adjustable Charge				
Tier 1: 0 - 10 hcf	\$1.2348	Tier 1: 0 - 6.26 hcf	\$0.00	\$0.00	\$0.00	
Tier 2: Over 10 hcf	\$1.2348	Tier 2: 6.27 - 12.52 hcf	\$0.00	\$0.00	\$0.00	
		Tier 3: 12.53 - 31.03 hcf	\$0.11	\$0.21	\$0.35	
		Tier 4: 31.04 - 40.28 hcf	\$0.12	\$0.24	\$0.39	
		Tier 5: Over 40.28 hcf	\$0.12	\$0.24	\$0.39	
Total Variable Charge		Total Variable Charge				
Tier 1: 0 - 10 hcf	\$2.0747	Tier 1: 0 - 6.26 hcf	\$1.52	\$1.59	\$1.72	
Tier 2: Over 10 hcf	\$3.0411	Tier 2: 6.27 - 12.52 hcf	\$1.89	\$2.00	\$2.18	
		Tier 3: 12.53 - 31.03 hcf	\$3.13	\$3.29	\$3.53	
		Tier 4: 31.04 - 40.28 hcf	\$3.47	\$3.65	\$3.93	
		Tier 5: Over 40.28 hcf	\$3.97	\$4.19	\$4.52	

	Dec 15, 2010		Apr 27, 2012	Jan 1, 2013	Jan 1, 2014
Delivery Charge	,	Variable Charge		,	
Tier 1: 0 - 10 hcf	\$0.8399	Tier 1: 0 - 5.10 hcf	\$1.61	\$1.69	\$1.8
Tier 2: Over 10 hcf	\$1.8063	Tier 2: 5.11 - 10.20 hcf	\$2.92	\$2.96	\$3.0
		Tier 3: Over 10.20 hcf	\$3.42	\$3.49	\$3.60
Water Adjustable Charge		Water Adjustable Charge			
Tier 1: 0 - 10 hcf	\$1.2348	Tier 1: 0 - 5.10 hcf	\$0.00	\$0.00	\$0.00
Tier 2: Over 10 hcf	\$1.2348	Tier 2: 5.11 - 10.20 hcf	\$0.12	\$0.24	\$0.3
		Tier 3: Over 10.20 hcf	\$0.12	\$0.24	\$0.39
Total Variable Charge		Total Variable Charge			
Tier 1: 0 - 10 hcf	\$2.0747	Tier 1: 0 - 5.10 hcf	\$1.61	\$1.69	\$1.8
Tier 2: Over 10 hcf	\$3.0411	Tier 2: 5.11 - 10.20 hcf	\$3.04	\$3.20	\$3.4
		Tier 3: Over 10.20 hcf	\$3.54	\$3.73	\$3.99

COMMERCIAL						
	Dec 15, 2010		Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	
Delivery Charge		Variable Charge				
Tier 1: 0 - 10 hcf	\$0.8399	All Use	\$2.68	\$2.75	\$2.87	
Tier 2: Over 10 hcf	\$1.8063					
Water Adjustable Charge	\$1.2348	Water Adjustable Charge	\$0.07	\$0.14	\$0.23	
Total Variable Charge		Total Variable Charge	\$2.75	\$2.89	\$3.10	
Tier 1: 0 - 10 hcf	\$2.0747					
Tier 2: Over 10 hcf	\$3.0411					

	IRRIGATION										
	Dec 15, 2010		Apr 27, 2012	Jan 1, 2013	Jan 1, 2014						
Delivery Charge		Variable Charge									
Tier 1: 0 - 10 hcf	\$0.8399	All Use	\$2.87	\$2.95	\$3.08						
Tier 2: Over 10 hcf	\$1.8063										
Water Adjustable Charge	\$1.2348	Water Adjustable Charge	\$0.07	\$0.14	\$0.23						
Total Variable Charge		Total Variable Charge	\$2.94	\$3.09	\$3.31						
Tier 1: 0 - 10 hcf	\$2.0747										
Tier 2: Over 10 hcf	\$3.0411										

^{1 -} Beginning on April 27, 2012, the tier breakpoints for multi-family customers are prorated based on the number of dwelling units

Current Recycled Water Rates

The City's current recycled water rates are based on a 25 percent discount from the potable rates as shown on Table 3.

Table 3. Current Recycled Water Rates

	MONTHLY RECYCLED WATER CUSTOMER CHARGE										
Meter Size	Dec 15, 2010	Meter Size	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014						
5/8"	\$11.7437	5/8"	\$14.05	\$14.71	\$15.89						
3/4"	\$11.7437	3/4"	\$16.48	\$17.26	\$18.62						
1.0"	\$11.7437	1.0"	\$21.35	\$22.34	\$24.11						
1.5"	\$20.6460	1.5"	\$33.51	\$35.06	\$37.82						
2.0"	\$33.5231	2.0"	\$48.11	\$50.33	\$54.29						
3.0"	\$51.4918	3.0"	\$82.18	\$85.95	\$92.69						
4.0"	\$87.5443	4.0"	\$130.85	\$136.84	\$147.54						
6.0"	\$139.0032	6.0"	\$252.50	\$264.05	\$284.69						
8.0"	\$222.9176	8.0"	\$398.51	\$416.71	\$449.27						
10.0"	\$319.0849	10.0"	\$568.83	\$594.81	\$641.27						
12.0"	\$446.7222	12.0"	-	-	-						

	MONTHLY RECYCLED WATER VARIABLE CHARGES									
COMMERCIAL RECYCLED WATER RATE										
	Dec 15, 2010		Apr 27, 2012	Jan 1, 2013	Jan 1, 2014					
Delivery Charge		Variable Charge								
Tier 1: 0 - 10 hcf	\$0.6299	All Use	\$2.0100	\$2.06	\$2.15					
Tier 2: Over 10 hcf	\$1.3547									
Water Adjustable Charge	\$0.9261	Water Adjustable Charge	\$0.0525	\$0.11	\$0.17					
Total Variable Charge		Total	\$2.0625	\$2.17	\$2.32					
Tier 1: 0 - 10 hcf	\$1.5560									
Tier 2: Over 10 hcf	\$2.2808									

IRRIGATION RECYCLED WATER RATE									
	Dec 15, 2010		Apr 27, 2012	Jan 1, 2013	Jan 1, 2014				
Delivery Charge		Variable Charge							
Tier 1: 0 - 10 hcf	\$0.6299	All Use	\$2.1525	\$2.21	\$2.31				
Tier 2: Over 10 hcf	\$1.3547								
Water Adjustable Charge	\$0.9261	Water Adjustable Charge	\$0.0525	\$0.11	\$0.17				
Total Variable Charge		Total	\$2.2050	\$2.32	\$2.48				
Tier 1: 0 - 10 hcf	\$1.5560								
Tier 2: Over 10 hcf	\$2.2808								

^{1 -} Recycled water rates are based on a 25% discount from the potable rates.

Current Private Fire Line Rates

A private fire line customer is defined as a connection used solely for standby service for private fire protection. Due to concerns of overcharging, the City Council suspended fire line charges for fire lines 4" and greater beginning on January 1, 2014. The 2012 Study did not include

updated rates for 2" and 3" fire lines. Consequently, these fire line charges are still based on the 2010 rates as shown on Table 4.

Table 4. Current Private Fire Line Rates

	MONTHLY PRIVATE FIRE LINE WATER CUSTOMER CHARGE										
Size	Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014							
2.0"	\$13.4725	\$13.4725	\$13.4725	\$13.4725							
3.0"	\$28.1415	\$28.1415	\$28.1415	\$28.1415							
4.0"	\$39.0828	\$116.73	\$187.65	\$0.00							
6.0"	\$55.8573	\$185.34	\$367.19	\$0.00							
8.0"	\$78.1887	\$297.22	\$587.84	\$0.00							
10.0"	\$133.9884	\$425.45	\$851.03	\$0.00							

	MONTHLY PRIVATE FIRE VARIABLE CHARGES										
	Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014							
Delivery Charge											
0 - 10 hcf	\$0.9204	\$0.9204	\$0.9204	\$0.9204							
Over 10 hcf	\$2.0709	\$2.0709	\$2.0709	\$2.0709							
Water Adjustable Charge	\$1.2348	\$0.0700	\$0.1400	\$0.2300							
Total Variable Charge											
Tier 1: 0 - 10 hcf	\$2.1552	\$0.9904	\$1.0604	\$1.1504							
Tier 2: Over 10 hcf	\$3.3057	\$2.1409	\$2.2109	\$2.3009							

^{1 -} Private fire line rates were suspended in January 2014. Prior adopted rates: 4" = \$202.37, 6" = \$395.98, 8" = \$633.96, 10" = \$917.86

Water Consumption

BWA evaluated the City's water use over a three year period from 2010/11 through 2012/13 in which total consumption increased over 11 percent as detailed on Table 5. Total potable and recycled water use in 2012/13 was 12,012,100 hcf. Because the City does not anticipate any significant changes in overall consumption patterns over the next five years, 2012/13 consumption is used as the baseline for 2013/14.

Table 5. Total Annual Water Consumption

Year	Total Consumption (hcf)	Annual Change
2010/11	10,833,843	
2011/12	11,435,950	5.6%
2012/13	12,012,100	5.0%

Customers and Usage by Category

The City provides water service to a population of approximately 192,000. Residential accounts (single family and multi-family residential) account for nearly 89 percent of all water customers and represent 77 percent of total water usage as shown in Table 6 and Table 7, respectively. Non-residential customers, including commercial and irrigation accounts represent 11 percent of all meters, and 23 percent of annual usage. The City also has 78 recycled water meters, serving irrigation and commercial accounts including the City's own facilities. In 2012, recycled water consumption represented 5 percent of total water usage in the City.

Table 6. Current Water Accounts

	6: 1								Commercial								
	Single Family	Multi-Family	Master Meter	Master Meter	Common Areas for			Common Areas for	Master		Small	City of	Public				
Meter Size	Residential	Residential	Residential	Water	Areas for	Condos	Commercial	Business	Meter	Industrial	Business	Glendale	Authority	No Facility	Irrigation	Total	% of Total
Billing Code	S	M	MM	MW	Apts	CD	Commercial	CA	CM	industriai	SB	Giendale	PA	NO Facility	IR	Iotai	% Of Total
Billing Code	3	IVI	IVIIVI	IVIVV	А	CD	·	LA .	CIVI		38	G	PA	F	IK		
								POTABLE	METERS								
5/8"	3,642	193	8	114	16	38	281	PUTABLE 4	2	4	350	8	0	0	16	4,676	14%
3/4"	13,330	1,170	42	1,164	298	47	498	4	12	18	422	18	1	2	69	17,095	51%
1.0"	5,032	478	26	445	356	636	299	6	3	17	188	43	2	1	91	7,623	23%
1.5"	266	27	16	563	622	0.50	276	4	8	17	97	43	2	1	38	1,980	6%
2.0"	76	7	16	466	391	0	435	6	11	74	87	91	1	2	85	1,748	5%
3.0"	0	0	5	28	11	0	53	0	1	11	2	8	1	1	7	128	0%
4.0"	0	0	2	18	7	0	24	0	1	11	2	3	1	0	1	70	0%
6.0"	0	0	0	3	0	0	12	1	0	4	0	6	0	0	2	28	0%
8.0"	0	0	0	0	0	0	5	0	1	2	0	1	0	0	0	9	0%
10.0"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
12.0"	<u>0</u>	0	<u>0</u>	<u>0</u>	<u>0</u>	0	0	0	<u>0</u>	<u>0</u>	0	0	0	<u>0</u>	<u>0</u>	0	0%
Total	22,346	1,875	115	2,801	1,701	721	1,883	25	39	158	1,148	221	8	7	309	33,357	100%
% of Total	67.0%	5.6%	0.3%	8.4%	5.1%	2.2%	5.6%	0.1%	0.1%	0.5%	3.4%	0.7%	0.0%	0.0%	0.9%	100.0%	
							R	ECYCLED W	ATER METER	S							
5/8"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
3/4"	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1%
1.0"	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	4	5%
1.5"	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	5	6%
2.0"	0	0	0	0	0	0	3	0	0	0	0	28	0	0	8	39	50%
3.0"	0	0	0	0	0	0	2	0	0	0	0	2	0	2	2	8	10%
4.0"	0	0	0	0	0	0	2	0	0	0	0	3	0	1	3	9	12%
6.0"	0	0	0	0	0	0	1	0	0	0	0	3	0	0	3	7	9%
8.0"	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	4	5%
10.0"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
12.0"	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	0	<u>0</u>	0	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	0	<u>0</u>	<u>0</u>	<u>1</u>	1%
Total	0	0	0	0	0	0	9	0	0	0	0	46	0	3	20	78	100%
% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.5%	0.0%	0.0%	0.0%	0.0%	59.0%	0.0%	3.8%	25.6%	100.0%	

^{1 -} Source: Active Water Meters by Category/Bill Code, Data Date 7/13/2013. Does not include meters that are not billed water (W-NOBL)

Table 7. 2012/13 Total Water Consumption – Includes Potable and Recycled Water

Category Description	2012/13 Consumption (hcf)	Percent of Total
City Of Glendale	265,322	2.2%
Commercial Business	1,350,724	11.2%
Commercial W/Master-Metered Water (Business)	53,637	0.4%
Common Use Areas For Apartment Or Condos	1,557,585	13.0%
Common Use Electric/Water For Businesses	27,897	0.2%
Condominium Units	50,510	0.4%
No Facility	15,427	0.1%
Industrial - Large Business	296,866	2.5%
Irrigation Meters	552,720	4.6%
Master-Metered Residential	134,462	1.1%
Multi-Family Residential	436,830	3.6%
Multi-Family W/Master-Metered Water	2,218,119	18.5%
Public Authority	22,068	0.2%
Single Family Residential	4,811,675	40.1%
Small Business	218,257	1.8%
Total	12,012,100	100.0%

Meter Equivalents

The most common method to levy fixed charges is by meter size. Meter size is used as a proxy for the estimated demand that each customer places on the water system. The base meter is most commonly a 5/8-inch or ¾-inch meter. The ratio at which the meter charge increases is typically a function of either meter investment (estimated cost) or the meter's safe operating capacity. A significant portion of a water system's design and, in turn, the utility's operating and capital costs are related to meeting capacity requirements.

The City's current meter charges are aligned with the AWWA meter capacity ratios. For example, based on the AWWA meter capacity ratios, a customer that has a 2-inch meter has the capacity equivalency of 5.33 3/4-inch meters. (A 2-inch meter has a safe operating capacity of 160 gallons per minute (gpm) compared to a ¾-inch meter which has a safe operating capacity of 30 gpm).

The City completed a meter flow analysis and determined the safe operating capacity or the "continuous flow" for each meter size based on the Badger Meter specifications. As shown on Table 8, the meter ratios have been updated to better represent each meter's actual flow. Based on the continuous flow ratios, a 2-inch meter has the capacity equivalency of four 3/4-inch meters.



Table 8. Meter Equivalents

Meter Size Potable Water (1) Recycled Water (1) Fire Lines (2) Total 5/8" 4,676 0 - 4,676		N	IUMBER OF METERS		
3/4"	Meter Size			Fire Lines (2)	Total
1.0" 7,623 4 4 - 7,627 1.5" 1,980 5 - 1,985 3.0" 1,748 39 48 1,835 3.0" 128 8 2 2 138 4.0" 70 9 712 791 6.6" 92 8 7 215 250 8.0" 9 4 81 94 10.0" 0 0 0 2 2 2 2 10.0" 1,061 33,357 78 1,061 34,496 METER EQUIVALENT/DEMAND RATIOS	5/8"	4,676	0	-	4,676
1.5" 1,980 5 - 1,985 2.0" 1,748 39 48 1,835 3.0" 128 8 2 138 4.0" 70 9 712 791 6.0" 28 7 215 250 8.0" 9 4 81 94 10.0" 0 0 2 2 2 12.0" 0 1 1 1 2 2 Meter Size Potable Water (3) Recycled Water (3) Fire Lines (4) 5/8" 0.60 0.60 - <td>3/4"</td> <td>17,095</td> <td>1</td> <td>=</td> <td>17,096</td>	3/4"	17,095	1	=	17,096
2.0" 1,748 39 48 1,835 3.0" 128 8 2 138 4.0" 70 9 712 791 6.0" 28 7 215 250 8.0" 9 4 81 94 10.0" 0 0 2 2 2 12.0" 0 1 1 1 2 2 Total 33,357 78 1,061 34,496 Meter Size Potable Water (3) Fire Lines (4) 5/8" 0.60 0.60 - - 3/4" 1.00 1.00 - - 1.5" 3.20 3.20 2.90 - 3.0" 16.00 16.00 17.98 - 4.0" 32.00 32.00 38.32 - 6.0" 60.00 60.00 111.31 - 8.0" 140.00 140.00 237.21 - 10.0" 220.00 220.00 689.04	1.0"	7,623	4	-	7,627
3.0" 128 8 2 138 4.0" 70 9 712 791 6.0" 28 7 215 250 8.0" 9 4 81 94 10.0" 0 0 2 2 2 122.0" 0 1 1 2 2 Total 33,357 78 1,061 34,496 METER EQUIVALENT/DEMAND RATIOS Meter Size Potable Water (3) Fire Lines (4) 5/8" 0.60 0.60 - - 3/4" 1.00 1.00 - - - 1.5" 3.20 3.20 2.90 -	1.5"	1,980	5	-	1,985
4.0" 70 9 712 791 6.0" 28 7 215 250 8.0" 9 4 81 94 10.0" 0 0 2 2 2 12.0" 0 1 1 2 2 2 METER EQUIVALENT/DEMAND RATIOS Meter Size Potable Water (3) Fire Lines (4)	2.0"	1,748	39	48	1,835
6.0" 28 7 215 250 8.0" 9 4 81 94 10.0" 0 0 2 2 2 12.0" 0 1 1 2 2 1 2 1 34,496 2 2 2 1 2 1 34,496 34,000 34,000 34,000 34,000 34,000 34,496 34,496 34,496 34,496 34,496 34,496 34,496 34,496 34,496 34,496 34,496 34,496 34,496 34,496 34,496 34,496 34,496	3.0"	128	8	2	138
8.0" 9 4 81 94 10.0" 0 0 2 2 22.0" 0 1 1 1 2 2 METER EQUIVALENT/DEMAND RATIOS Meter Size Potable Water (3) Fire Lines (4) 5/8" 0.60 0.60 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	4.0"	70	9	712	791
10.0" 0 0 1 2 2 12.0" 0 1 1 1 1 2 Total 33,357 78 1,061 34,496 Meter Size Potable Water (3) Recycled Water (3) Fire Lines (4) 5/8" 0.60 0.60 0.60 0.7 1.00 1.00 1.0" 1.60 1.60 1.00 1.00 1.5" 3.20 3.20 2.90 2.0" 4.00 4.00 6.19 3.0" 16.00 16.00 17.98 4.0" 32.00 32.00 38.32 6.0" 60.00 60.00 111.31 8.0" 140.00 140.00 237.21 10.0" 1220.00 220.00 426.58 12.0" 220.00 220.00 689.04 Meter Size Potable Water Recycled Water Recycled Water Fire Lines 5/8" 2,806 0 1.0" 1,7095 1 1.5" 6,336 16 1.5" 6,336 16 2.0" 6,992 156 297 3.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 0 0 853 12.0" 0 0 853	6.0"	28	7	215	250
12.0" Q 1 1 1 2 34,496	8.0"	9	4	81	94
Total 33,357 78 1,061 34,496	10.0"	0	0	2	2
METER EQUIVALENT/DEMAND RATIOS Meter Size Potable Water (3) Recycled Water (3) Fire Lines (4) 5/8" 0.60 0.60 - 3/4" 1.00 1.00 - 1.0" 1.60 1.60 1.00 1.5" 3.20 3.20 2.90 2.0" 4.00 4.00 6.19 3.0" 16.00 16.00 17.98 4.0" 32.00 32.00 38.32 6.0" 60.00 60.00 111.31 8.0" 140.00 140.00 237.21 10.0" 220.00 220.00 426.58 12.0" 220.00 220.00 689.04 **Meter Size** **Potable Water** **Potable Water** **Recycled Water** **Fire Lines** **Sign** **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **1.0"* **2.0"* **1.0"* **2.0"* **2.0"* **3.0"* **1.0"* **2.0"* **2.0"* **3.0"* **1.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **3.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **2.0"* **3.0"* **2.0"*	<u>12.0"</u>	<u>0</u>	1	<u>1</u>	
Meter Size Potable Water (3) Recycled Water (3) Fire Lines (4) 5/8" 0.60 0.60 - 3/4" 1.00 1.00 - 1.0" 1.60 1.60 1.00 1.5" 3.20 3.20 2.90 2.0" 4.00 4.00 6.19 3.0" 16.00 16.00 17.98 4.0" 32.00 32.00 38.32 6.0" 60.00 60.00 111.31 8.0" 140.00 140.00 237.21 10.0" 220.00 220.00 426.58 12.0" 220.00 220.00 689.04 ** **Meter Size** **Potable Water** **Potable Water** **Prize Lines** **Prize Line	Total	33,357	78	1,061	34,496
Meter Size Potable Water (3) Recycled Water (3) Fire Lines (4) 5/8" 0.60 0.60 - 3/4" 1.00 1.00 - 1.0" 1.60 1.60 1.00 1.5" 3.20 3.20 2.90 2.0" 4.00 4.00 6.19 3.0" 16.00 16.00 17.98 4.0" 32.00 32.00 38.32 6.0" 60.00 60.00 111.31 8.0" 140.00 140.00 237.21 10.0" 220.00 220.00 426.58 12.0" 220.00 220.00 689.04 ** **Meter Size** **Potable Water** **Potable Water** **Prize Lines** **Prize Line		METER EC	QUIVALENT/DEMAND RAT	TIOS	
5/8" 0.60 0.60 - 3/4" 1.00 1.00 - 1.0" 1.60 1.60 1.00 1.5" 3.20 3.20 2.90 2.0" 4.00 4.00 6.19 3.0" 16.00 17.98 4.0" 32.00 32.00 38.32 6.0" 60.00 60.00 111.31 8.0" 140.00 140.00 237.21 10.0" 220.00 220.00 426.58 12.0" 220.00 220.00 689.04 **TOTAL METER EQUIVALENTS **Meter Size** **Protable Water** **TOTAL METER EQUIVALENTS** **Meter Size** **Protable Water** **TOTAL METER EQUIVALENTS** **Protable Water** **Fire Lines** **Total METER EQUIVALENTS** **Protable Water** **Fire Lines** **Total METER EQUIVALENTS** **Protable Water** **Total METER EQUIVALENTS** **Protable Water** **Fire Lines** **Total METER EQUIVALENTS** **Protable Water** **Fire Lines** **Total METER EQUIVALENTS** **Total METER EQUIVALENTS** **Protable Water** **Fire Lines** **Total METER EQUIVALENTS** **Total METER EQUIV	Meter Size				
3/4" 1.00 1.00 - 1.0" 1.60 1.60 1.00 1.5" 3.20 3.20 2.90 2.0" 4.00 4.00 6.19 3.0" 16.00 16.00 17.98 4.0" 32.00 32.00 38.32 6.0" 60.00 60.00 111.31 8.0" 140.00 140.00 237.21 10.0" 220.00 220.00 426.58 12.0" 220.00 220.00 689.04 **Pire Lines* **S/8" **Quadratic Processor **S/8" **Quadratic Processor **Pire Lines* **S/8" **Quadratic Processor **Quadratic Processor	5/8"			-	
1.5" 3.20 3.20 2.90 2.0" 4.00 4.00 6.19 3.0" 16.00 16.00 17.98 4.0" 32.00 32.00 38.32 6.0" 60.00 60.00 111.31 8.0" 140.00 140.00 237.21 10.0" 220.00 220.00 426.58 12.0" 220.00 689.04 **Potable Water Recycled Water Fire Lines **S/8" **2,806** **0 0 - 3/4" 17,095 1 - 1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 0 853 12.0" 0 689	3/4"	1.00	1.00	-	
2.0" 4.00 4.00 6.19 3.0" 16.00 16.00 17.98 4.0" 32.00 32.00 38.32 6.0" 60.00 60.00 111.31 8.0" 140.00 140.00 237.21 10.0" 220.00 220.00 426.58 12.0" 220.00 220.00 689.04 TOTAL METER EQUIVALENTS Meter Size Potable Water Recycled Water Fire Lines 5/8" 2,806 0 - 3/4" 17,095 1 - 1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 0 689	1.0"	1.60	1.60	1.00	
3.0" 16.00 16.00 17.98 4.0" 32.00 32.00 38.32 6.0" 60.00 60.00 111.31 8.0" 140.00 140.00 237.21 10.0" 220.00 220.00 426.58 12.0" 220.00 220.00 689.04 TOTAL METER EQUIVALENTS Meter Size Potable Water Recycled Water Fire Lines 5/8" 2,806 0 - 3/4" 17,095 1 - 1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 3,0" 6,992 156 297 3.0" 3,0" 4,048 128 36 4,0" 2,240 288 27,284 6,0" 1,680 420 23,932 8,0" 1,260 560 19,214 10.0" 0 0 853 12.0" 689	1.5"	3.20	3.20	2.90	
4.0" 32.00 32.00 38.32 6.0" 60.00 60.00 111.31 8.0" 140.00 140.00 237.21 10.0" 220.00 220.00 426.58 12.0" 220.00 220.00 689.04 TOTAL METER EQUIVALENTS Meter Size Potable Water Recycled Water Fire Lines 5/8" 2,806 0 - 3/4" 17,095 1 - 1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 853 12.0" 0 220 689	2.0"	4.00	4.00	6.19	
6.0" 60.00 60.00 111.31 8.0" 140.00 140.00 237.21 10.0" 220.00 220.00 426.58 12.0" 220.00 220.00 689.04 TOTAL METER EQUIVALENTS Meter Size Potable Water Recycled Water Fire Lines 5/8" 2,806 0 - 3/4" 17,095 1 - 1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 0 853 12.0" 0 220 689	3.0"	16.00	16.00	17.98	
8.0" 140.00 140.00 237.21 10.0" 220.00 220.00 426.58 12.0" 220.00 689.04 TOTAL METER EQUIVALENTS Meter Size Potable Water Recycled Water Fire Lines 5/8" 2,806 0 - 3/4" 17,095 1 - 1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 0 853 12.0" 0 220 689	4.0"	32.00	32.00	38.32	
10.0" 220.00 220.00 426.58 TOTAL METER EQUIVALENTS Meter Size Potable Water Recycled Water Fire Lines 5/8" 2,806 0 - 3/4" 17,095 1 - 1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 0 853 12.0" 0 220 689	6.0"	60.00	60.00	111.31	
TOTAL METER EQUIVALENTS Meter Size Potable Water Recycled Water Fire Lines 5/8" 2,806 0 - 3/4" 17,095 1 - 1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 853 12.0" 0 689	8.0"	140.00	140.00	237.21	
TOTAL METER EQUIVALENTS Meter Size Potable Water Recycled Water Fire Lines 5/8" 2,806 0 - 3/4" 17,095 1 - 1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 853 12.0" 0 689	10.0"	220.00	220.00	426.58	
Meter Size Potable Water Recycled Water Fire Lines 5/8" 2,806 0 - 3/4" 17,095 1 - 1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 853 12.0" 0 689	12.0"	220.00	220.00	689.04	
5/8" 2,806 0 - 3/4" 17,095 1 - 1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 853 12.0" 0 220 689		TOTA	AL METER EQUIVALENTS		
3/4" 17,095 1 - 1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 853 12.0" 0 220 689	Meter Size	Potable Water	Recycled Water	Fire Lines	
1.0" 12,197 6 - 1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 853 12.0" 0 220 689	5/8"	2,806	0	-	
1.5" 6,336 16 - 2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 0 853 12.0" 0 220 689	3/4"	17,095	1	-	
2.0" 6,992 156 297 3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 0 853 12.0" 0 220 689	1.0"	12,197	6	-	
3.0" 2,048 128 36 4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 0 853 12.0" 0 220 689	1.5"	6,336	16	-	
4.0" 2,240 288 27,284 6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 0 853 12.0" 0 220 689	2.0"	6,992	156	297	
6.0" 1,680 420 23,932 8.0" 1,260 560 19,214 10.0" 0 0 853 12.0" 0 220 689	3.0"	2,048	128	36	
8.0" 1,260 560 19,214 10.0" 0 0 853 12.0" 0 220 689	4.0"	2,240	288	27,284	
10.0" 0 0 853 12.0" 0 220 689			420	23,932	
10.0" 0 0 853 12.0" 0 220 689	8.0"	1,260	560	19,214	
-	10.0"		0	853	
Total 52,654 1,795 72,305	12.0"	<u>0</u>	<u>220</u>	<u>689</u>	
	Total	52,654	1,795	72,305	

¹ - Source: Active Water Meters by Category/Bill Code, Data Date 7/13/2013

^{2 -} Fire line count updated by staff in December 2013. The City currently has one 12" fire line that is currently charged a 10" fire line rate.

^{3 -} Source: Meter Sizes and Ratios, 3/31/14, Continuous Flow based on Badger Meter Specifications.

^{4 -} Demand factors for fire based on AWWA methodology.

Financial Overview

The water utility is a financially self-supporting fund that relies primarily on water service charges to fund the costs of operating and maintaining the water system. Future rates need to be set at levels adequate to fund GWP's costs of providing service, which generally include costs for a) operations and maintenance, b) water supply, c) capital improvements and associated debt service requirements, d) infrastructure repairs and replacements, and e) costs for maintaining an adequate level of fund reserves to provide financial cushion for revenue shortfalls, unanticipated expenditures, and emergencies. Water rates account for approximately 92 percent of the water utility's annual revenues, with the remainder of revenues coming from a combination of rental income, private fire service, interest earnings, and other miscellaneous charges.

GWP has historically maintained a prudent level of fund reserves; however cash reserves are currently below target levels. The water fund has been operating in a negative cash balance since 2010; cash reserves decreased to roughly negative \$12.9 million as of June 30, 2013. The objective of this rate analysis is to restore the water fund's financial stability and to gradually replenish cash reserves to healthy levels.

The water utility is facing a number of financial challenges in upcoming years, primarily related to increases in wholesale water rates from MWD and capital projects needed to restore aging facilities. Rate increases are needed to address these long-term financial challenges and help support safe, reliable, and sustainable water service.

SECTION 3: LEGAL REQUIREMENTS & RATE METHODOLOGY

Constitutional Rate Requirements

The California Constitution includes two key articles that directly govern or impact GWP's water rates: Article 10 and Article 13D. The water rates developed in this study were designed to comply with both of these constitutional mandates as well as various provisions of the California Water Code and Government Code that support and add further guidance for implementing these constitutional requirements. In accordance with the constitutional provisions, the proposed rates are designed to a) recover the City's cost of providing service, b) recover revenues in proportion to the cost for serving each customer, and c) promote conservation and discourage waste.

Article 10, Section 2

Article 10, Section 2 of the California Constitution was established by voter-approval in 1976 and requires public agencies to maximize the beneficial use of water, prevent waste, and encourage conservation. Section 2 states that:

It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.

Article 13D. Section 6

Proposition 218 was adopted by California voters in 1996 and added Articles 13C and 13D to the California Constitution. Article 13D, Section 6 governs property-related charges, which the California Supreme Court subsequently ruled includes ongoing utility service charges such as water, sewer, and garbage rates. Article 13D, Section 6 establishes a) procedural requirements for imposing or increasing property-related charges, and b) substantive requirements for those charges. Article 13D also requires voter approval for new or increased property-related charges but exempts from this voting requirement rates for water, sewer, and garbage service.

The substantive requirements of Article 13D, Section 6 require GWP's water rates to meet the following conditions:

1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service.

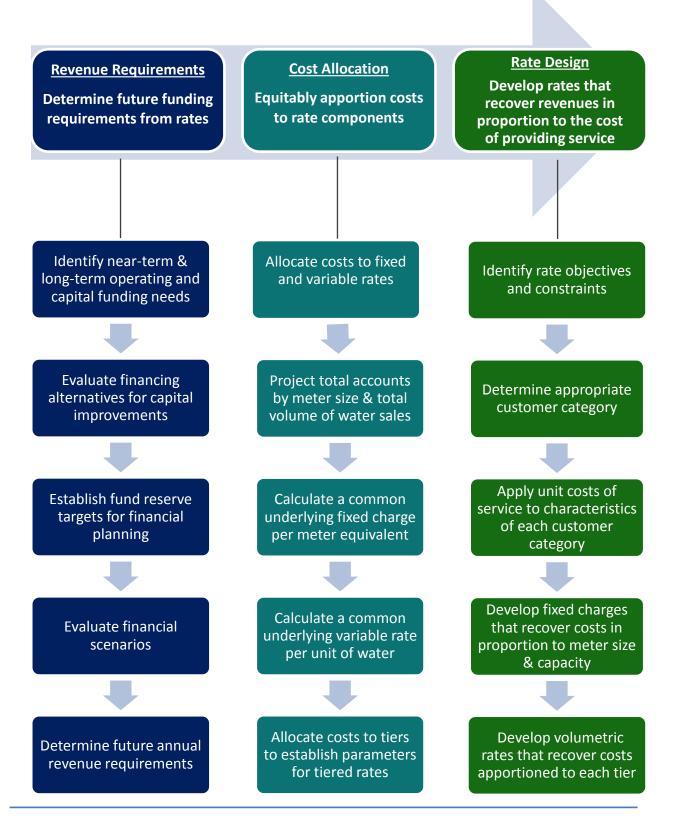
- 2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
- 3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
- 4) No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question.
- 5) No fee or charge may be imposed for general governmental services, such as police or fire services, where the service is available to the public at large in substantially the same manner as it is to property owners.

A subsequent appellate court decision in 2011 further clarified that agencies must demonstrate, satisfactory to a court's independent judgment, that property-related fees and charges meet the proportionality requirement of Section 6.(3). This rate study provides that justification. The water rates derived in this report are based on a cost-of-service methodology that fairly apportions costs to all customers.

Rate-Setting Methodology

The rates developed in this report use a straightforward methodology to establish an equitable system of fixed and variable charges that recover the cost of providing service and fairly apportion costs to each rate component. The general methodology used in this study is summarized on the diagram on the following page.

Cost of Service Rate-Setting Methodology



The following is a brief description of the water financial plan and rate design process:

- Financial Plan Projections/Revenue Requirements: Revenue requirements are analyzed through the development of a long-term financial plan. Based on the best information currently available, the financial plan incorporates projected operation and maintenance costs, capital expenditures, debt service, growth, and conservation assumptions to estimate annual revenue requirements. The plan serves as a roadmap for funding the water enterprise's future operating and capital programs while maintaining long-term fiscal stability. The financial plan projections determine the annual water revenue requirements to be recovered through water rates and other revenue sources.
- Cost of Service: The cost of service process builds on the financial plan analysis and assigns water system costs to functional cost components which are then allocated to the various customer category. This process is intended to proportionately allocate costs associated with each customer category based on the demand that they place on the system.
- Rate Design: Rate design involves developing a rate structure that proportionately recovers costs from water system customers. Final rate recommendations are designed to (a) fund the utility's long-term costs of providing service; (b) proportionately allocate costs to all customers; (c) provide a prudent balance of revenue stability and conservation incentive; and (d) comply with the substantive requirements of Proposition 218.

SECTION 4: FINANCIAL PROJECTIONS & REVENUE REQUIREMENTS

BWA developed a cash flow projection using the City's "Five-Year Plan" and Water Capital Plan to estimate annual revenue requirements and necessary rate adjustments to fund the water system's operating and capital needs.

Water Fund Reserves

In 2006, the City Council approved a cash reserve policy for the water utility. The current target is \$11.3 million and includes reserves for an operating reserve, a contingency reserve, and a rate stabilization fund. However, as of July 1, 2013, the fund had a negative cash balance in the amount of approximately \$12.9 million. This negative cash balance resulted from investment in infrastructure projects such as the advanced metering infrastructure which resulted in an ongoing advance from the City's pooled cash reserve. The water utility pays interest on the advance to the pool, which is currently 1% per annum and declining. The beginning cash balances for the past three fiscal years are shown on Table 9.

Table 9. Beginning Cash Balances

	July 1, 2011	July 1, 2012	July 1, 2013
Debt Service Reserve	3,484,700	3,484,700	5,749,600
Bond Proceeds Remaining	0	0	27,216,100
Unrestricted Cash Reserves	(10,840,400)	(22,859,200)	(12,877,600)
Total	(7,355,700)	(19,374,500)	20,088,100

Source: Five-Year Plan 3/13/14, Income Statement - Water

Maintaining a prudent minimal level of fund reserves provides a financial cushion for dealing with unanticipated expenses, revenue shortfalls, debt requirements, and emergency capital repairs. It is acceptable if reserves fall below the target on a temporary basis, provided action is taken to achieve the target over the longer term. City staff projects the negative cash balance to fully amortize by 2016/17 through a combined strategy of incremental rate increases, continued cost cutting strategies, and prioritization of resources.

Outstanding Debt

The City currently has two outstanding debt issues – the 2008 bonds for \$50 million and the 2012 bonds for \$35 million. As a covenant of the bonds, the water fund is required to maintain a debt service coverage ratio of 125 percent of net revenues. Debt service coverage is generally

defined as Net Revenues (total annual revenues less operating and maintenance expenses) divided by annual debt service. Debt secured by water revenues is typically secured by a legal pledge to raise rates and charges as needed to generate Net Revenues that exceed 120 percent to 125 percent of debt service, to provide investors with security that annual revenues will be more than sufficient to pay debt service. Revenues generated in excess of operating and debt service costs are typically used to fund costs for capital expenditures and other discretionary expenditures.

Ongoing Operating Cost Inflation

GWP faces ongoing operating cost inflation due to annual increases in a range of expenses including staffing, utilities, insurance, supplies, etc. Rate increases are needed to maintain revenues that are in line with the cost of providing service and enable future revenues to remain in line with ongoing cost inflation. Table 10 summarizes the water system's projected operating expenses through 2018/19.

Table 10. Operating Expenses

		Actual		Proj Actuals			Five-Year Plan		
Expenses Category	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
POTABLE WATER OPERATION & MAINTENANCE									
Potable Water Operation	44.000.000	44 050 400	44.054.500	4242.000	4046400	4054400	\$879.700	4000 400	\$933,300
Operation Potable Water Facilities Operation Potable Water Power for Pumping	\$1,336,600 1,993,400	\$1,353,400 2,193,400	\$1,051,700 2,159,600	\$747,600 2,162,400	\$816,100 2,650,300	\$854,100 2,729,800	\$879,700 2.811.700	\$906,100 2,896,000	2,982,900
Operation Potable Wtr Quality & Treat Plants	2,047,500	2,229,400	2,477,500	1,716,000	1,202,900	1,239,000	1,276,100	1,314,400	1,353,800
Operation Potable Wtr Purchased for Resale	13,706,600	14,853,000	16,963,900	18,332,400	17,779,600	18,274,100	18,986,700	19,647,500	20,392,800
Operation Potable Water Miscellaneous	195,600	409,900	478,300	238,800	146,900	155,200	159,800	164,600	169,600
Security Activities	60,400	0	0	0	0	500	500	500	500
General Fund Security Activities	403.300	0 357,900	0 290,900	132,000	0	500,000 87,300	500,000 89,900	1,000,000 92.600	1,000,000 95,400
Operations-Cr6 Demo Fac Chromium Removal Facilities	403,200 0	357,900	290,900	132,000	184,800 171.400	171.400	181,900	187,300	193,000
Subtotal Potable Water Operation	19,743,300	21,397,000	23,421,900	23,329,200	22,952,000	24,011,400	24,886,300	26,209,000	27,121,300
	.,				,,				
Potable Water Source Maintenance									
Maintenance of Potable Water Wells	90,800	91,800	35,300	90,000	43,000	44,300	45,600	47,000	48,400
Maintenance Potable Wtr Production & Pumping	1,029,600 54.800	1,292,400	1,133,900	715,200	156,500	161,200	166,000 70,500	171,000 72,600	176,100
Maintenance Potable Water Treat Plant Subtotal Potable Water Source Maintenance	1,175,200	66,700 1.450.900	71,100 1.240.300	21,600 826.800	66,500 266,000	68,500 274,000	282,100	290,600	74,800 299,300
Subtotal Fotable Water Source Maintenance	1,173,200	1,430,300	1,240,300	020,000	200,000	274,000	202,200	250,000	233,300
Potable Water Transmission & Distribution Mtc									
Maintenance Potable Water Reservoir & Tanks	516,100	693,900	447,900	315,600	142,200	146,500	150,900	155,400	160,000
Maintenance Potable Water Mains	439,500	931,100	960,500	356,400	789,600	813,300	837,700	862,800	888,700
Maintenance Potable Water Hydrants	170,700	244,800	321,100	228,000	234,900	241,900	249,200	256,700	264,400
Maintenance Potable Water Sevices Maintenance Potable Water Meters	266,300 192,100	382,100 449,400	408,800 716,200	133,200 469,200	318,100 515,800	327,600 531,300	337,500 547,200	347,600 563,600	358,000 580,600
Subtotal Potable Water Trans & Distrib. Mtc	1,584,700	2,701,300	2,854,500	1,502,400	2,000,600	2,060,600	2,122,500	2,186,100	2,251,700
The state of the s	_,,,,	_,. 02,500	_,,	_,,	_,_,,,,,,,,	_,_ 50,000	_,,	_,_50,100	_,,00
Maintenance Potable Water Misc	436,600	517,800	800,600	613,200	1,342,800	1,280,100	1,318,500	1,358,000	1,398,800
Smart Grid Maintenance	0	0	85,400	43,200	0	0	0	0	0
Fiber Maintenance	<u>0</u>	<u>0</u>	<u>0</u>	25,200	137,000	141,200	145,400	149,700	154,200
Subtotal	436,600	517,800	886,000	681,600	1,479,800	1,421,300	1,463,900	1,507,700	1,553,000
TOTAL POTABLE WATER OPERATION & MAINTENANCE	22,939,800	26,067,000	28,402,700	26,340,000	26,698,400	27,767,300	28,754,800	30,193,400	31,225,300
	22,533,000	20,007,000	20,-02,700	20,340,000	20,030,400	21,101,300	20,7 34,000	30,233,400	Japan 2000
RECYCLED WATER OPERATION & MAINTENANCE									
Recycled Water Operation									
Operation Recycled Water Facilities	159,500	215,200	258,000	202,800	185,400	191,000	196,700	202,600	208,700
Operation Recycled Wtr Power for Pumping	223,400	244,000	277,000	525,600	263,000	270,900	279,000	287,400	296,000
Operation Recycled Water Miscellaneous Subtotal Recycled Water Operation	39,300 422,200	47,000 506,200	<u>52,500</u> 587,500	26,400 754,800	39,200 487,600	40,400 502,300	41,600 517,300	42,800 532,800	44,100 548,800
Subtotal Necycled Water Operation	422,200	300,200	387,300	754,000	467,000	302,300	317,300	332,600	340,000
Recycled Water Source Maintenance									
Maintenance Recycled Wtr Prod & Pumping	207,800	148,200	235,600	66,000	250,200	257,700	265,400	273,400	281,600
Subtotal Recycled Water Source Maintenance	207,800	148,200	235,600	66,000	250,200	257,700	265,400	273,400	281,600
Recycled Water Transmission & Distribution Mtc	4.000	20.400	6 200	1 200	11.000	44 200	44 700	12.000	12 400
Maintenance Recycled Water Res/Tanks Maintenance Recycled Water Mains	4,900 4,600	20,400 1,900	6,300 7,900	1,200 18,000	11,000 9,900	11,300 10,200	11,700 10,500	12,000 10,800	12,400 11,200
Maintenance Recycled Water Hydrants	0	0	0	10,000	800	800	900	900	900
Maintenance Recycled Water Sevices	8,000	3,500	0	2,400	4,400	4,400	4,600	4,800	4,900
Maintenance Recycled Water Meters	<u>o</u>	<u>0</u>	<u>0</u>	<u>0</u>	29,900	29,900	31,700	32,700	33,700
Subtotal Recycled Water Trans & Distrb. Mtc	17,500	25,800	14,200	21,600	56,000	56,600	59,400	61,200	63,100
Maintenance Recycled Water Misc	3,000	300	800	2,400	33,000	34,000	35,000	36,100	37,200
TOTAL RECYCLED WATER OPERATION & MAINTENANCE	650,500	680,500	838,100	844,800	826,800	850,600	877,100	903,500	930,700
		,	,	,	,	,	,=	,	,
OTHER WATER OPERATING EXPENSES									
Water Services Engineering	1,551,200	1,677,400	1,782,800	1,046,400	1,546,400	1,592,800	1,640,600	1,689,800	1,740,500
AMI Support	0	0	21,500	292,800	393,300	655,700	675,400	695,600	716,500
Small Tools Expense	110,500	128,100	76,800	90,000	64,800	66,700	68,700	70,800	72,900
Other Water Services Operating Expenses TOTAL OTHER WATER OPERATING EXPENSES	1,506,000 3,167,700	2,023,800 3,829,300	(231,700) 1,649,400	7,094,400 8,523,600	5,932,500 7,937,000	6,648,200 8,963,400	6,713,400 9,098,100	6,961,000 9,417,200	7,301,800 9,831,700
TOTAL OTTER WATER OF ERATING EXPENSES	3,107,700	3,023,300	1,043,400	0,323,000	7,557,000	0,505,400	3,030,100	3,417,200	3,031,700
TOTAL WATER OPERATION & MAINTENANCE EXPENSES	26,758,000	30,576,800	30,890,200	35,708,400	35,462,200	37,581,300	38,730,000	40,514,100	41,987,700
WATER SERVICES NON-OPERATING EXPENSES									
Transfers to Other Funds	4.160.000	0	0	0	0	0	0	0	0
Water System Plant Depreciation	3,225,000	4,253,900	5,136,500	5.164.800	4,954,500	5,500,000	6.000.000	6,500,000	7,000,000
Gwp Depreciation of Genl Fac (Wtr 32%)	268,600	273,000	264,000	238,800	300,000	325,000	350,000	375,000	400,000
Principal - 2008 Bonds	0	0	0	1,210,000	1,245,000	1,285,000	1,325,000	1,370,000	1,420,000
Interest - 2008 Bonds	2,437,600	1,255,500	1,347,500	2,198,400	2,214,300	2,177,600	2,137,800	2,084,800	2,030,000
Principal - 2012 Bonds	0	0	0	0	0	0	0	415,000	435,000
Interest - 2012 Bonds	0	20,400	649,400	911,200	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Bond Sale Expense - 2008 Bonds Bond Sale Expense - 2012 Bonds	25,900 0	28,400	7,500 873,600	8,400 0	50,000	50,000 0	50,000 0	50,000 0	50,000
Gladys Drive Reimbursement	0	1,000,000	1,000,000	1,000,000	0	0	0	0	0
Miscellaneous Non-Operating Expense	8,900	16,000	1,000,000 <u>0</u>	0	0	0	0	0	0
TOTAL WATER SERVICES NON-OPERATING EXPENSES	10,126,000	6,826,800	9,278,500	10,731,600	10,013,800	10,587,600	11,112,800	12,044,800	12,585,000
WATER FUND ALLOCATIONS (EVENESS)									
WATER FUND ALLOCATIONS/EXPENSES General Plant Allocation	545,100	882,900	0	272,000	821,500	0	0	0	0
Customer Service Expense	2,336,200	3,201,700	2,025,500	2,797,200	2,750,000	2,819,300	2,903,700	2,990,700	3,080,500
TOTAL WATER FUND ALLOCATIONS/EXPENSES	2,881,300	4,084,600	2,025,500	3,069,200	3,571,500	2,819,300	2,903,700	2,990,700	3,080,500
CADITAL DROIFCTS									
CAPITAL PROJECTS Bond Funded	0	0	3,860,244	7,511,018	15,459,208	4,491,715	0	0	0
PayGo	19,644,400	17,460,200	6,748,400	7,511,018	15,459,208	1,500,000	4,050,838	4,150,738	4,150,738
TOTAL CAPITAL PROJECTS	19,644,400	17,460,200	10,608,644	7,511,018	15,459,208	5,991,715	4,050,838	4,150,738	4,150,738
TOTAL WATER SYSTEM SYSTEMS	FO 400 700	FO 040 400	F2 002 046	F7 030 345	C4 FOC 300	FC 070 04-	FC 707 222	F0 700 330	C1 002 022
TOTAL WATER SYSTEM EXPENSES	59,409,700	58,948,400	52,802,844	57,020,218	04,506,708	56,979,915	ob,/97,338	59,700,338	61,803,938

Source: Five-Year Plan (4-7-2014) and FINAL Water Five Year Capital Plan (4-3-2014)

MWD Water Purchases

Water purchases account for approximately 32 percent of total water utility expenses. In 2013/14, GWP anticipates purchasing approximately 18,700 AF of water from MWD at a cost of \$890 per AF. Despite the City's efforts to use water efficiently and to conserve, MWD's water rates continue to increase. The wholesale water base rates increased by 5 percent effective January 1, 2014 and will increase by 1.5 percent for the next two years. MWD revises its wholesale water rates every two years. The most recent MWD whole sale rates are shown below (the effective rate increase to Glendale is 3.7% and 2.1%)

Year	Charge per AF	% Increase
2014	\$890	
2015	\$923	3.7%
2016	\$942	2.1%

In addition to the costs to purchase water, a large part of the total operating expense is comprised of electricity for pumping water through the transmission and distribution system.

Capital Improvement Program

The City has and will need to continue funding ongoing rehabilitation and replacement of its aging water system. As shown on Table 11, the water capital improvement program (CIP) through 2018/19 includes roughly \$54.8 million in infrastructure improvements to the water system. Projects include transmission and distribution system expansion and water supply improvements which include water pumps, wells, monitoring and control systems and water supply facilities.

Projects also include repairing and replacing aging facilities. A significant portion of the GWP's water pipelines were installed 40 to 70 years ago and are approaching the end of their useful lives. Many old pipelines are deteriorating and inadequately sized and no longer meet fire flow requirements. Additionally, a number of other facilities, including reservoirs, wells, and water storage tanks, are aging and will need to be refurbished in upcoming years. As aging facilities reach the end of their useful lives, the City must make substantial investments in rehabilitation and replacements. The City has made significant investments in the water system over the past 20 years and will continue to do so in the future.

Table 11. Capital Improvement Program

Description	5-Year Total				
Description	Bond	Pay Go	Customer	Total	
Water Services Capital					
A. Potable Water Source Capital Improvements	7,702,291	1,655,214	629,799	9,987,304	
Potable Water Source Improvements	478,786	-	629,799	1,108,585	
Potable Water Pumping Plant Improvements	6,107,212	778,500	-	6,885,712	
Potable Water Quality & Treatment Plant Improvements	1,116,293	876,714	-	1,993,007	
B. Potable Water Transmission & Distribution Capital Improvements	18,973,662	12,097,000	10,835,890	41,906,552	
Potable Water Wells	834,542	-	-	834,542	
Potable Water Reservoir/Tanks	904,423	-	-	904,423	
Potable Water Mains	17,234,697	12,097,000	10,835,890	40,167,587	
C. Recycled Water Source Capital Improvements	785,988	100,100	2,001,250	2,887,338	
Recycled Water Transmission/Distribution Capital Improvements	785,988	100,100	2,001,250	2,887,338	
Total Water Services Capital	\$27,461,941	\$13,852,314	\$13,466,939	\$54,781,194	

Capital improvements through 2015/16 will primarily be funded from the 2012 bond proceeds. Future infrastructure projects will be paid for with cash reserves on a pay-as-you-go basis.

Projected Future Growth

The City anticipates a moderate level of future growth. The projections include growth of 0.5 percent per year through fiscal year 2018/19.

Water Enterprise Financial Projections

BWA developed long-term cash flow projections to determine the water fund's annual revenue requirements and project water rate increases. The financial projections incorporate the latest information available as well as a number of reasonable and slightly conservative assumptions. Key assumptions are listed below:

- The financial projections are based on the 2013/14 Budget and Five Year Plan.
- Growth is projected at 0.5 percent annually.
- The first rate adjustment will be effective September 1, 2014. Rate increases thereafter will be effective on July 1 of each year.

- The projections account for the purchase of 19,221 Acre-Feet (AF) of water in 2014/15 from MWD at a cost of \$890 per AF. Future water purchases are estimated to increase nearly 6 percent through 2016.
- The projections assume GWP will use debt proceeds to fund capital needs through 2015/16. Future infrastructure projects will be paid for with cash on a pay-as-you-go basis.
- Water sales are projected to slightly decline for each 5% of rate increases due to price elasticity.
- The water fund will refund fire line customers with fire lines 4" and larger that were overcharged approximately \$3.4 million over the next five years. The refund will be repaid beginning in 2014/15.
- The projections show the water fund will continue to comply with its debt coverage covenants.

Cash Flow Projection

Based on evaluation of different financial scenarios and input from City staff, the projections for the Base Scenario include 5 percent annual rate increases for 2014/15 and 2015/16, followed by 4 percent annual rate increases beginning in 2016/17 through 2018/19 to fund GWP's projected costs of providing service. The increases are phased in to minimize impacts on customers while covering operating and capital costs, meeting debt service coverage, building reserves, and maintaining the long-term viability of the water enterprise. The cash flow projection and recommended annual revenue adjustments are shown on Table 12.

Table 12. Base Scenario: Cash Flow Projection

	Projected	Five-Year Plan					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	
Assumptions:							
Revenue Adjustment (Assumes 12 months of rate increases)		5.0%	5.0%	4.0%	4.0%	4.0%	
Interest Earnings Rate	0.5%	0.3%	0.5%	0.5%	1.0%	1.0%	
Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	
Operating Revenues - Charges for Services							
Potable Sales Based on 12 Months of Increases	\$44,517,200	\$46,977,000	\$49,053,000	\$51,270,000	\$53,587,000	\$56,009,000	
Recycled Water Sales Based on 12 Months of Increases	1,955,000	2,063,000	2,154,000	2,251,000	2,353,000	2,459,000	
Total Water Sales Based on 12 Months of Increases	46,472,200	49,040,000	51,207,000	53,521,000	55,940,000	58,468,000	
Operating Revenues - Charges for Services							
Potable Sales	\$44,517,200	\$46,485,000	\$49,053,000	\$51,270,000	\$53,587,000	\$56,009,000	
Recycled Sales	1,955,000	2,041,000	2,154,000	2,251,000	2,353,000	2,459,000	
Fireline Credit	1,555,000	(3,400,000)	2,134,000	2,231,000	2,333,000	2,433,000	
Total Retail Sales	46,472,200	45,126,000	51,207,000	53,521,000	55,940,000	58,468,000	
Operating Expenses Production	2E 04E 200	24,092,800	25 106 600	26.006.500	27 455 500	20 405 200	
Production Transmission and Distribution	25,045,200		25,186,600	26,096,500	27,455,500	28,405,200 13,582,500	
	10,663,200	11,369,400	12,394,700	12,633,500 2,903,700	13,058,600 2,990,700		
Customer Services Depreciation	2,797,200 5,403,600	2,750,000 5,254,500	2,819,300 5,825,000	6,350,000	6,875,000	3,080,500 7,400,000	
Total Operating Expenses	43,909,200	43,466,700	46,225,600	47,983,700	50,379,800	52,468,200	
Operating Income	2,563,000	1,659,300	4,981,400	5,537,300	5,560,200	5,999,800	
Non-Operating Revenues and Expenses							
Revenue from Customer Paid Projects	140,000	1,940,700	1,940,700	1,740,700	1,740,700	1,740,700	
Non-Operating Income	1,541,100	1,435,000	985,000	985,000	985,000	985,000	
Non-Operating Expense (Interest Expense)	(3,118,000)	(3,514,300)	(3,477,600)	(3,437,800)	(3,384,800)	(3,330,000)	
Total Non-operating Revenues, net	(1,436,900)	(138,600)	(551,900)	(712,100)	(659,100)	(604,300)	
Net Income Before Transfers	1,126,100	1,520,700	4,429,500	4,825,200	4,901,100	5,395,500	
Gladys Drive Reimbursement	1,000,000	-	-	-	-	-	
Net Income (Loss)	126,100	1,520,700	4,429,500	4,825,200	4,901,100	5,395,500	
Beginning Unrestricted Cash Reserves	(14,186,600)	(10,218,400)	(7,450,400)	(1,921,600)	2,137,062	6,236,724	
Add Non Cash Expense - Depreciation	5,403,600	5,254,500	5,825,000	6,350,000	6,875,000	7,400,000	
Net Unrestricted Cash Reserves	(\$8,783,000)	(4,963,900)	(1,625,400)	4,428,400	9,012,062	13,636,724	
Add Net Income	126,100	1,520,700	4,429,500	4,825,200	4,901,100	5,395,500	
Add Bond Proceeds	-	-	-	-	-	-	
Less Bond Principal Payments - 2008 Bonds	(1,210,000)	(1,245,000)	(1,285,000)	(1,325,000)	(1,370,000)	(1,420,000)	
Less Bond Principal Payments - 2012 Bonds	-	-	-	-	(415,000)	(435,000)	
Less Capital Expenditures - Pay Go	(272,000)	(821,500)	(1,500,000)	(4,050,838)	(4,150,738)	(4,150,738)	
Less Capital Expenditures - Customer Paid	(79,500)	(1,940,700)	(1,940,700)	(1,740,700)	(1,740,700)	(1,740,700)	
Revenues Less Expenses	(1,435,400)	(2,486,500)	(296,200)	(2,291,338)	(2,775,338)	(2,350,938)	
Ending Unrestricted Cash Reserves	(10,218,400)	(7,450,400)	(1,921,600)	2,137,062	6,236,724	11,285,786	
Beginning Bond Proceeds	28,525,100	21,014,082	5,554,874		-	-	
Bonds Proceeds	-	-	-	-	-	-	
Less Capital Expenditures - Bonds	(7,511,018)	(15,459,208)	(5,554,874)	-	-	-	
Ending Bond Proceeds	21,014,082	5,554,874	-	-	=	-	
Dobt Carries Courses Min 4 25	2.22	4 75	2.40	3.70	3.50	2 ==	
Debt Service Coverage - Min. 1.25 Debt Service Coverage Met	2.20 yes	1.75 yes	2.48 <i>yes</i>	2.70 yes	2.60 <i>yes</i>	2.77 <i>yes</i>	
	yes	yes	yes	усз	yes	yes	
Minimum Cash Reserve Target	11,300,000	11,300,000	11,300,000	11,300,000	11,300,000	11,300,000	
Cash Reserve Target Met	11,500,000 no	11,500,000 no	11,300,000 no	11,500,000 no	11,500,000 no	11,500,000 no	
,					Í	•	

 $[\]ensuremath{\text{1}}$ - Revenues for 2014/15 have been adjusted for September 1, 2014 effective date.

In future years, GWP should re-evaluate its finances and revenue requirements and adjust rates as needed based on updated projections. The City always has the flexibility to implement rates that are lower than those adopted pursuant to Proposition 218. However, future rates cannot exceed the adopted rate increases without going through the Proposition 218 process; rates adopted pursuant to Proposition 218 are essentially future rate caps.

Future Conservation and Price Elasticity

Due to the effects of water price elasticity, any increases in the water rates are expected to spur conservation. The price elasticity of demand is the percentage change in quantity of water consumed for each percent change in price and is assumed to apply only to increases above the Consumer Price Index (CPI).

Water price elasticity is usually negative, signifying that the price and the quantity demanded move in opposite directions such that an increase in price results in a decrease in quantity demanded. For example, a price elasticity factor of -1 means that for every 1 percent increase in price, a corresponding 1 percent decrease in consumption would be seen.

The responsiveness of water consumption to water rates is difficult to accurately forecast and varies by customer category, regions, and time of year. This study applies standard price elasticity factors to estimate conservation as shown on Table 13. The impacts of this additional conservation due to price elasticity have been estimated and built into the cash flow projections.

Water demand for outdoor discretionary uses (such as lawn watering, garden irrigation, and car washing) is generally more elastic than indoor non-discretionary water uses. To reflect the elasticity of outdoor usage, the projections apply separate price elasticity factors to each single family and multi-residential tier. Price elasticity is assumed to apply only to increases above the Consumer Price Index (CPI). The CPI is commonly used as a measure of inflation which is estimated at 3 percent annually based on the historical average change in the CPI.

Table 13 also shows projected water consumption by customer category through 2018/19. The consumption projections have been adjusted for price elasticity. Consumption for 2013/14 is based on actual 2012/13 usage data.

After three consecutive years of below-normal rainfall, California is facing a severe drought emergency. Governor Jerry Brown has called for Californians to reduce water use by 20 percent voluntarily and mandatory rationing could be declared in the near future. If the drought conditions continue, consumption levels will decrease below projected levels at which

time the City may choose to implement drought rates. Drought rates are discussed in Section 7.

Table 13. Price Elasticity Assumptions

		Base Year		F	ive-Year Plan		
		2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Annual Rate Increase (from	Cash Flow)		5.0%	5.0%	4.0%	4.0%	4.0%
CPI Assumption			3.0%	3.0%	3.0%	3.0%	3.0%
Net Rate Increase for Elasti	city Calculation		2.0%	2.0%	1.0%	1.0%	1.0%
ELASTICITY ASSUMPTIONS	1						
Single Family Residential	I						
Tier 1			-0.20	-0.20	-0.20	-0.20	-0.20
Tier 2			-0.40	-0.40	-0.40	-0.40	-0.40
Tier 3			-0.80	-0.80	-0.80	-0.80	-0.80
Tier 4			-0.80	-0.80	-0.80	-0.80	-0.80
Multi Family Residential							
Tier 1			-0.20	-0.20	-0.20	-0.20	-0.20
Tier 2			-0.60	-0.60	-0.60	-0.60	-0.60
Commercial			-0.40	-0.40	-0.40	-0.40	-0.40
Irrigation			-0.80	-0.80	-0.80	-0.80	-0.80
CUSTOMER GROWTH ASSU Single Family Residential			0.5%	0.5%	0.5%	0.5%	0.5%
Multi Family Residential	•		0.5%	0.5%	0.5%	0.5%	0.5%
Commercial			0.5%	0.5%	0.5%	0.5%	0.5%
Irrigation			0.0%	0.0%	0.0%	0.0%	0.0%
ANNUAL CONSUMPTION F Single Family Residential	•	F)					
	•	F) 1,568,261	1,569,829	1,571,399	1,576,113	1,580,841	1,585,584
Single Family Residential			1,569,829 1,202,672	1,571,399 1,199,064	1,576,113 1,200,263	1,580,841 1,201,463	
Single Family Residential Tier 1	32.6%	1,568,261					1,202,664
Single Family Residential Tier 1 Tier 2	32.6% 25.1%	1,568,261 1,206,291	1,202,672	1,199,064	1,200,263	1,201,463	1,202,664 1,257,554
Single Family Residential Tier 1 Tier 2 Tier 3	32.6% 25.1% 27.0%	1,568,261 1,206,291 1,297,325	1,202,672 1,283,054	1,199,064 1,268,940	1,200,263 1,265,133	1,201,463 1,261,338	1,202,66 ⁴ 1,257,55 ⁴ 717,120
Single Family Residential Tier 1 Tier 2 Tier 3 <u>Tier 4</u>	32.6% 25.1% 27.0% <u>15.4%</u>	1,568,261 1,206,291 1,297,325 739,798	1,202,672 1,283,054 <u>731,661</u>	1,199,064 1,268,940 <u>723,613</u>	1,200,263 1,265,133 <u>721,442</u>	1,201,463 1,261,338 <u>719,278</u>	1,202,66 ² 1,257,55 ² 717,120 4,762,922
Single Family Residential Tier 1 Tier 2 Tier 3 <u>Tier 4</u> SFR Total	32.6% 25.1% 27.0% <u>15.4%</u>	1,568,261 1,206,291 1,297,325 739,798	1,202,672 1,283,054 <u>731,661</u> 4,787,216	1,199,064 1,268,940 723,613 4,763,016	1,200,263 1,265,133 721,442 4,762,951	1,201,463 1,261,338 <u>719,278</u> 4,762,920	1,202,66 ² 1,257,55 ² 717,120 4,762,922
Single Family Residential Tier 1 Tier 2 Tier 3 <u>Tier 4</u> SFR Total % Change	32.6% 25.1% 27.0% <u>15.4%</u>	1,568,261 1,206,291 1,297,325 739,798	1,202,672 1,283,054 <u>731,661</u> 4,787,216	1,199,064 1,268,940 723,613 4,763,016	1,200,263 1,265,133 721,442 4,762,951	1,201,463 1,261,338 <u>719,278</u> 4,762,920	1,202,664 1,257,554 <u>717,120</u> 4,762,922 0.0%
Single Family Residential Tier 1 Tier 2 Tier 3 <u>Tier 4</u> SFR Total % Change Multi Family Residential	32.6% 25.1% 27.0% <u>15.4%</u> 100.0%	1,568,261 1,206,291 1,297,325 739,798 4,811,675	1,202,672 1,283,054 731,661 4,787,216 -0.5%	1,199,064 1,268,940 723,613 4,763,016 -0.5%	1,200,263 1,265,133 721,442 4,762,951 0.0%	1,201,463 1,261,338 719,278 4,762,920 0.0%	1,202,664 1,257,554 717,120 4,762,922 0.0% 2,805,477
Single Family Residential Tier 1 Tier 2 Tier 3 <u>Tier 4</u> SFR Total % Change Multi Family Residential Tier 1	32.6% 25.1% 27.0% 15.4% 100.0%	1,568,261 1,206,291 1,297,325 739,798 4,811,675	1,202,672 1,283,054 731,661 4,787,216 -0.5%	1,199,064 1,268,940 723,613 4,763,016 -0.5% 2,780,379	1,200,263 1,265,133 721,442 4,762,951 0.0%	1,201,463 1,261,338 719,278 4,762,920 0.0% 2,797,086	1,202,664 1,257,554 717,120 4,762,922 0.0% 2,805,477 1,595,247
Single Family Residential Tier 1 Tier 2 Tier 3 Tier 4 SFR Total % Change Multi Family Residential Tier 1 Tier 2	32.6% 25.1% 27.0% 15.4% 100.0%	1,568,261 1,206,291 1,297,325 739,798 4,811,675 2,774,826 1,622,680	1,202,672 1,283,054 731,661 4,787,216 -0.5% 2,777,601 1,611,321	1,199,064 1,268,940 723,613 4,763,016 -0.5% 2,780,379 1,600,042	1,200,263 1,265,133 721,442 4,762,951 0.0% 2,788,720 1,598,442	1,201,463 1,261,338 719,278 4,762,920 0.0% 2,797,086 1,596,844	1,202,664 1,257,554 717,120 4,762,922 0.0% 2,805,477 1,595,247 4,400,724
Single Family Residential Tier 1 Tier 2 Tier 3 Tier 4 SFR Total % Change Multi Family Residential Tier 1 Tier 2 MFR Total	32.6% 25.1% 27.0% 15.4% 100.0%	1,568,261 1,206,291 1,297,325 739,798 4,811,675 2,774,826 1,622,680	1,202,672 1,283,054 731,661 4,787,216 -0.5% 2,777,601 1,611,321 4,388,922	1,199,064 1,268,940 723,613 4,763,016 -0.5% 2,780,379 1,600,042 4,380,421	1,200,263 1,265,133 721,442 4,762,951 0.0% 2,788,720 1,598,442 4,387,162	1,201,463 1,261,338 719,278 4,762,920 0.0% 2,797,086 1,596,844 4,393,930	1,202,664 1,257,554 717,120 4,762,922 0.0% 2,805,477 1,595,247 4,400,724 0.2%
Single Family Residential Tier 1 Tier 2 Tier 3 Tier 4 SFR Total % Change Multi Family Residential Tier 1 Tier 2 MFR Total % Change	32.6% 25.1% 27.0% 15.4% 100.0% 63.1% 36.9% 100.0%	1,568,261 1,206,291 1,297,325 739,798 4,811,675 2,774,826 1,622,680 4,397,506	1,202,672 1,283,054 731,661 4,787,216 -0.5% 2,777,601 1,611,321 4,388,922 -0.2%	1,199,064 1,268,940 723,613 4,763,016 -0.5% 2,780,379 1,600,042 4,380,421 -0.2%	1,200,263 1,265,133 721,442 4,762,951 0.0% 2,788,720 1,598,442 4,387,162 0.2%	1,201,463 1,261,338 719,278 4,762,920 0.0% 2,797,086 1,596,844 4,393,930 0.2%	1,202,664 1,257,554 717,120 4,762,922 0.0% 2,805,477 1,595,247 4,400,724 0.2% 2,243,434
Single Family Residential Tier 1 Tier 2 Tier 3 Tier 4 SFR Total % Change Multi Family Residential Tier 1 Tier 2 MFR Total % Change Commercial	32.6% 25.1% 27.0% 15.4% 100.0% 63.1% 36.9% 100.0%	1,568,261 1,206,291 1,297,325 739,798 4,811,675 2,774,826 1,622,680 4,397,506	1,202,672 1,283,054 731,661 4,787,216 -0.5% 2,777,601 1,611,321 4,388,922 -0.2% 2,243,447	1,199,064 1,268,940 723,613 4,763,016 -0.5% 2,780,379 1,600,042 4,380,421 -0.2% 2,236,717	1,200,263 1,265,133 721,442 4,762,951 0.0% 2,788,720 1,598,442 4,387,162 0.2% 2,238,954	1,201,463 1,261,338 719,278 4,762,920 0.0% 2,797,086 1,596,844 4,393,930 0.2% 2,241,193	1,202,664 1,257,554 717,120 4,762,922 0.0% 2,805,477 1,595,247 4,400,724 0.2% 2,243,434 0.1%
Single Family Residential Tier 1 Tier 2 Tier 3 Tier 4 SFR Total % Change Multi Family Residential Tier 1 Tier 2 MFR Total % Change Commercial % Change	32.6% 25.1% 27.0% 15.4% 100.0% 63.1% 36.9% 100.0%	1,568,261 1,206,291 1,297,325 739,798 4,811,675 2,774,826 1,622,680 4,397,506	1,202,672 1,283,054 731,661 4,787,216 -0.5% 2,777,601 1,611,321 4,388,922 -0.2% 2,243,447 -0.3%	1,199,064 1,268,940 723,613 4,763,016 -0.5% 2,780,379 1,600,042 4,380,421 -0.2% 2,236,717 -0.3%	1,200,263 1,265,133 721,442 4,762,951 0.0% 2,788,720 1,598,442 4,387,162 0.2% 2,238,954 0.1%	1,201,463 1,261,338 719,278 4,762,920 0.0% 2,797,086 1,596,844 4,393,930 0.2% 2,241,193 0.1%	1,202,664 1,257,554 717,120 4,762,922 0.0% 2,805,477 1,595,247 4,400,724 0.2% 2,243,434 0.1% 522,433
Single Family Residential Tier 1 Tier 2 Tier 3 Tier 4 SFR Total % Change Multi Family Residential Tier 1 Tier 2 MFR Total % Change Commercial % Change	32.6% 25.1% 27.0% 15.4% 100.0% 63.1% 36.9% 100.0%	1,568,261 1,206,291 1,297,325 739,798 4,811,675 2,774,826 1,622,680 4,397,506	1,202,672 1,283,054 731,661 4,787,216 -0.5% 2,777,601 1,611,321 4,388,922 -0.2% 2,243,447 -0.3% 543,876	1,199,064 1,268,940 723,613 4,763,016 -0.5% 2,780,379 1,600,042 4,380,421 -0.2% 2,236,717 -0.3% 535,174	1,200,263 1,265,133 721,442 4,762,951 0.0% 2,788,720 1,598,442 4,387,162 0.2% 2,238,954 0.1% 530,893	1,201,463 1,261,338 719,278 4,762,920 0.0% 2,797,086 1,596,844 4,393,930 0.2% 2,241,193 0.1% 526,646	1,202,664 1,257,554 717,120 4,762,922 0.0% 2,805,477 1,595,247 4,400,724 0.2% 2,243,434 0.1% 522,433 -0.8%
Single Family Residential Tier 1 Tier 2 Tier 3 Tier 4 SFR Total % Change Multi Family Residential Tier 1 Tier 2 MFR Total % Change Commercial % Change Irrigation % Change	32.6% 25.1% 27.0% 15.4% 100.0% 63.1% 36.9% 100.0%	1,568,261 1,206,291 1,297,325 739,798 4,811,675 2,774,826 1,622,680 4,397,506 2,250,198	1,202,672 1,283,054 731,661 4,787,216 -0.5% 2,777,601 1,611,321 4,388,922 -0.2% 2,243,447 -0.3% 543,876 -1.6%	1,199,064 1,268,940 723,613 4,763,016 -0.5% 2,780,379 1,600,042 4,380,421 -0.2% 2,236,717 -0.3% 535,174 -1.6%	1,200,263 1,265,133 721,442 4,762,951 0.0% 2,788,720 1,598,442 4,387,162 0.2% 2,238,954 0.1% 530,893 -0.8%	1,201,463 1,261,338 719,278 4,762,920 0.0% 2,797,086 1,596,844 4,393,930 0.2% 2,241,193 0.1% 526,646 -0.8%	1,585,584 1,202,664 1,257,554 717,120 4,762,922 0.0% 2,805,477 1,595,247 4,400,724 0.2% 2,243,434 0.1% 522,433 -0.8% 11,929,513

SECTION 4: COST OF SERVICE

The cash flow projection detailed in the previous section determined the amount of revenue needed to be generated from water rates. The cost of service analysis builds on the revenue requirements by providing a basis for recovering revenues from customers based on the unique demands they place on the water system. Proposition 218 requires that agencies providing "property-related services" (including water utility service) set rates and charges that are based on the cost of providing those services.

The rates proposed in this report were developed using generally accepted cost-based principles and methodologies for establishing water rates, charges, and fees contained and discussed in the AWWA's M1 Manual, Principles of Water Rates, Fees, and Charges, Sixth Edition, 2012. In developing water rates, it is important to know that there is no "one-size-fits-all" approach for establishing cost-based water rates, "the (M1 Manual) is aimed at outlining the basic elements involved in water rates and suggesting alternative rules of procedure for formulating rates, thus permitting the exercise of judgment and preference to meet local conditions and requirements." ²

Fixed vs. Variable Charges

Public agencies have used a wide range of approaches or perspectives for allocating and recovering costs. Depending on perspective, the same costs can reasonably be allocated 100 percent to fixed revenue recovery, 100 percent to variable rate recovery, or to some combination of the two. For example, debt service used to fund water treatment facilities can legitimately be treated as a) a fixed annual cost that should be recovered from fixed charges, b) a cost related to providing water supply to meet customer demand and therefore a cost that should be recovered from variable rates, or c) a cost that can be recovered from both fixed and variable rates in recognition of the two alternative perspectives.

Many of the City's costs are fixed costs that do not vary by water consumption, such as operational and staff costs, as well as costs for building and maintaining infrastructure. However, a portion of these fixed costs can reasonably be apportioned to variable, usage-based rate recovery in recognition that a portion of these fixed costs are related to the variable water use. For example, a share of the fixed cost of salaries related to water production can

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² AWWA Manual M1 Manual, Principles of Water Rates, Fees, and Charges, Sixth Edition, 2012, page 5.

reasonably be recovered from usage-based charges as these costs are incurred to provide water supply to meet customer demand. Likewise, debt service payments may be fixed annual costs, but it is reasonable to recover some of these costs from usage-based rates as the costs are incurred to fund infrastructure that will improve the water delivery system.

While there is no single correct approach, BWA believes that costs should be allocated within a reasonable range that reflects both a) underlying cost causation, to the extent such causation can reasonably be determined or estimated, and b) the policy preferences of the agency in cases where a range of reasonable approaches can be justified.

Water utilities can recover costs from a combination of fixed and variable charges. The percentage of revenues derived from the fixed and variable charges varies for each agency and should be proportional to each system's expenditures and must not exceed the cost of providing service. A higher level of fixed charges provides better revenue stability and less dependence on variable sales. On the other hand, higher dependence on volumetric revenues provides a better conservation incentive.

Current Revenue Allocations

Based on 2013/14 revenue projections, the water enterprise currently collects approximately 30 percent of total water sales revenues from fixed customer charges and 70 percent from the metered charges as summarized on Table 14. The water utility also receives approximately \$1 million each year in miscellaneous revenue not related to water sales, such as interest income, collectible income, and the sale of property.

Table 14. Projected 2013/14 Revenues and Fixed vs. Variable Recovery Allocation

Size Customer Charge Revenues (2)							
5/8" \$1,144,404 \$0 3/4" \$4,906,949 \$215 1.0" \$2,833,012 \$1,115 1.5" \$1,154,498 \$2,186 2.0" \$1,462,971 \$24,481 \$7,760 3.0" \$182,922 \$8,575 \$675 4.0" \$159,251 \$15,357 \$801,641 6.0" \$122,919 \$23,047 \$473,675 8.0" \$62,350 \$20,784 \$285,690 10.0" \$0 \$7,416 \$10,212 Total \$12,029,277 \$103,176 \$1,579,654 \$0 VARIABLE REVENUES Single Family Residential \$11,728,495 \$0 \$568,753 Multi-Family \$9,898,499 \$0 \$498,344 Commercial \$5,430,751 \$668,435 \$416,287 Irrigation \$2828,085 \$628,427 \$102,253 Total \$27,885,830 \$1,296,862 \$0 \$1,585,636 TOTAL REVENUES \$39,915,107 \$1,400,038	Meter Size	Potable	Recycled Water	Private Fire (1)	WAC - Potable	WAC - Recycled Water	TOTAL
3/4" \$4,906,949 \$215 \$1.0" \$2,833,012 \$1,115 \$1.5" \$1,154,498 \$2,186 \$2.0" \$1,462,971 \$24,481 \$7,760 \$3.0" \$182,922 \$8,575 \$675 \$4.0" \$159,251 \$15,357 \$801,641 \$6.0" \$122,919 \$23,047 \$473,675 \$8.0" \$62,350 \$20,784 \$285,690 \$10.0" \$62,350 \$20,784 \$285,690 \$10.0" \$12,029,277 \$103,176 \$1,579,654 \$0 \$10,212 \$10,0" \$12,029,277 \$103,176 \$1,579,654 \$0 \$568,753 \$10,176 \$1,579,654 \$0 \$10,176 \$1,579,654			FIXED CUSTO	MER CHARGE REVI	ENUES (2)		
1.0" \$2,833,012 \$1,115 1.5" \$1,154,498 \$2,186 2.0" \$1,462,971 \$24,481 \$7,760 3.0" \$182,922 \$8,575 \$675 4.0" \$159,251 \$15,357 \$801,641 6.0" \$122,919 \$23,047 \$473,675 8.0" \$62,350 \$20,784 \$285,690 10.0" \$0 \$7,416 \$10,212 Total \$12,029,277 \$103,176 \$1,579,654 \$0 VARIABLE REVENUES Single Family Residential \$11,728,495 \$0 \$568,753 Multi-Family \$9,898,499 \$0 \$498,344 Commercial \$5,430,751 \$668,435 \$416,287 Irrigation \$828,085 \$628,427 \$102,253 Total \$27,885,830 \$1,296,862 \$0 \$1,585,636 TOTAL REVENUES \$39,915,107 \$1,400,038 \$1,579,654 \$1,585,636 \$6 FIXED VS. VARIABLE REVENUE RECOVERY	-, -	\$1,144,404	\$0				\$1,144,404
1.5" \$1,154,498 \$2,186 2.0" \$1,462,971 \$24,481 \$7,760 3.0" \$182,922 \$8,575 \$675 4.0" \$159,251 \$15,357 \$801,641 6.0" \$122,919 \$23,047 \$473,675 8.0" \$62,350 \$20,784 \$285,690 10.0" \$0 \$7,416 \$10,212 Total \$12,029,277 \$103,176 \$1,579,654 \$0 \$7416,287 \$11,728,495 \$0 \$5,430,751 \$668,435 \$416,287 \$1016 \$27,885,830 \$1,296,862 \$0 \$1,585,636 \$6 \$6 \$7 \$7 \$7 \$7 \$7 \$7 \$7 \$7 \$7 \$7 \$7 \$7 \$7	3/4"	\$4,906,949	\$215				\$4,907,164
2.0" \$1,462,971 \$24,481 \$7,760 \$3.0" \$182,922 \$8,575 \$675 \$4.0" \$159,251 \$15,357 \$801,641 \$6.0" \$122,919 \$23,047 \$473,675 \$8.0" \$62,350 \$20,784 \$285,690 \$10.0" \$0 \$7,416 \$10,212 \$10,00" \$12,029,277 \$103,176 \$1,579,654 \$0 \$568,753 \$Multi-Family \$9,898,499 \$0 \$5498,344 \$24988,344 \$2498,344 \$2498,344 \$2498,344 \$2498,344 \$24988,344 \$24988,344 \$24988,344 \$24988,344 \$24	1.0"	\$2,833,012	\$1,115				\$2,834,127
3.0" \$182,922 \$8,575 \$675 \$4.0" \$159,251 \$159,357 \$801,641 \$6.0" \$122,919 \$23,047 \$473,675 \$8.0" \$62,350 \$20,784 \$285,690 \$10.0" \$0 \$7.416 \$10,212 \$103,176 \$1,579,654 \$0 \$11,728,495 \$0 \$498,344 \$298,690 \$0 \$498,344 \$298,690 \$0 \$498,344 \$0 \$10,000	1.5"	\$1,154,498	\$2,186				\$1,156,685
4.0" \$159,251 \$15,357 \$801,641 6.0" \$122,919 \$23,047 \$473,675 8.0" \$62,350 \$20,784 \$285,690 10.0" \$0 \$7.416 \$10,212 Total \$12,029,277 \$103,176 \$1,579,654 \$0 \$568,753 Multi-Family \$9,898,499 \$0 \$5498,344 \$2498,344 \$240,287 \$176 \$10,287 \$10	2.0"	\$1,462,971	\$24,481	\$7,760			\$1,495,212
6.0" \$122,919 \$23,047 \$473,675 8.0" \$62,350 \$20,784 \$285,690 10.0" \$0 \$7.416 \$10,212 Total \$12,029,277 \$103,176 \$1,579,654 \$0 \$10,579,654 \$0 \$10,579,654 \$0 \$10,579,654 \$0 \$10,579,654 \$0 \$10,579,654 \$0 \$10,579,654 \$0 \$10,579,654 \$0 \$10,579,654 \$0 \$10,579,654 \$0 \$10,579,654 \$0 \$10,579,654 \$0 \$10,579,654 \$1,57	3.0"	\$182,922	\$8,575	\$675			\$192,172
8.0" \$62,350 \$20,784 \$285,690 \$10.0" \$0 \$7,416 \$10,212 \$103,176 \$1,579,654 \$0 \$103,176 \$1,579,654 \$0 \$103,176 \$1,579,654 \$0 \$103,176 \$1,579,654 \$0 \$103,176 \$1,579,654 \$0 \$103,176 \$1,579,654 \$0 \$103,176 \$1,579,654 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$0 \$1,585,636 \$1,296,862 \$1,585,636 \$1,296,862 \$1,585,636 \$1,585,63	4.0"	\$159,251	\$15,357	\$801,641			\$976,249
SO S7.416 S10.212 S12,029,277 S103,176 S10.212 S12,029,277 S103,176 S1,579,654 S0 S568,753 S10,212 S10,225 S10,212 S10,225 S	6.0"	\$122,919	\$23,047	\$473,675			\$619,641
Sizer Size	8.0"	\$62,350	\$20,784	\$285,690			\$368,824
VARIABLE REVENUES \$11,728,495 \$0 \$568,753 Multi-Family \$9,898,499 \$0 \$498,344 Commercial \$5,430,751 \$668,435 \$416,287 Irrigation \$828,085 \$628,427 \$102,253 Total \$27,885,830 \$1,296,862 \$0 \$1,585,636 \$70TAL REVENUES \$39,915,107 \$1,400,038 \$1,579,654 \$1,585,636 \$6 \$6 \$70 \$70 \$1,585,636 \$70 \$	10.0"	<u>\$0</u>	<u>\$7,416</u>	\$10,212			\$17,629
Single Family Residential \$11,728,495 \$0 \$568,753 Multi-Family \$9,898,499 \$0 \$498,344 Commercial \$5,430,751 \$668,435 \$416,287 Irrigation \$828,085 \$628,427 \$102,253 Total \$27,885,830 \$1,296,862 \$0 \$1,585,636 TOTAL REVENUES \$39,915,107 \$1,400,038 \$1,579,654 \$1,585,636 \$ % of Total 89.6% 3.1% 3.5% 3.6%	Total	\$12,029,277	\$103,176	\$1,579,654	\$0	\$0	\$13,712,107
Multi-Family \$9,898,499 \$0 \$498,344 Commercial \$5,430,751 \$668,435 \$416,287 Irrigation \$828,085 \$628,427 \$102,253 Total \$27,885,830 \$1,296,862 \$0 \$1,585,636 TOTAL REVENUES \$39,915,107 \$1,400,038 \$1,579,654 \$1,585,636 % of Total 89.6% 3.1% 3.5% 3.6%			VA	ARIABLE REVENUES			
Commercial \$5,430,751 \$668,435 \$416,287 Irrigation \$828,085 \$628,427 \$102,253 Total \$27,885,830 \$1,296,862 \$0 \$1,585,636 TOTAL REVENUES \$39,915,107 \$1,400,038 \$1,579,654 \$1,585,636 % of Total 89.6% 3.1% 3.5% 3.6% FIXED VS. VARIABLE REVENUE RECOVERY	Single Family Residential	\$11,728,495	\$0		\$568,753	\$0	\$12,297,248
Irrigation \$828,085 \$628,427 \$102,253 \$1,585,636 \$1,585,63	Multi-Family	\$9,898,499	\$0		\$498,344	\$0	\$10,396,843
Total \$27,885,830 \$1,296,862 \$0 \$1,585,636 TOTAL REVENUES \$39,915,107 \$1,400,038 \$1,579,654 \$1,585,636 \$ % of Total 89.6% 3.1% 3.5% 3.6% FIXED VS. VARIABLE REVENUE RECOVERY	Commercial	\$5,430,751	\$668,435		\$416,287	\$44,456	\$6,559,929
TOTAL REVENUES \$39,915,107 \$1,400,038 \$1,579,654 \$1,585,636 \$ % of Total 89.6% 3.1% 3.5% 3.6% FIXED VS. VARIABLE REVENUE RECOVERY	<u>Irrigation</u>	\$828,085	\$628,427		\$102,253	\$38,929	\$1,597,694
% of Total 89.6% 3.1% 3.5% 3.6% FIXED VS. VARIABLE REVENUE RECOVERY	Total	\$27,885,830	\$1,296,862	\$0	\$1,585,636	\$83,386	\$30,851,714
% of Total 89.6% 3.1% 3.5% 3.6% FIXED VS. VARIABLE REVENUE RECOVERY							
FIXED VS. VARIABLE REVENUE RECOVERY	TOTAL REVENUES	\$39,915,107	\$1,400,038	\$1,579,654	\$1,585,636	\$83,386	\$44,563,821
	% of Total	89.6%	3.1%	3.5%	3.6%	0.2%	100.0%
			FIXED VS. VA	RIABLE REVENUE R	ECOVERY		
Fixed 30% 7% 100% 0%	Fixed	30%	7%	100%	0%	0%	31%
<u>Variable</u> 70% 93% 0% 100%	<u>Variable</u>	<u>70%</u>	<u>93%</u>	<u>0%</u>	100%	<u>100%</u>	<u>69%</u>
Total 100% 100% 100% 100%	Total	100%	100%	100%	100%	100%	100%

Revenue stability is a major concern for utilities State-wide due to the recent drought and water concerns. An increase in the amount of revenue collected through the fixed charges would provide increased revenue stability and better align revenue recovery with actual costs. BWA determined the proportionate allocation of costs through a base-extra capacity cost analysis.

Base-Extra Capacity Cost Allocation

The American Water Works Association (AWWA) recommends two primary methods to classify costs among various customers: (1) the Base-Extra Capacity method in which costs are allocated to the different customer categories proportionate to their use of the water system; and (2) the Commodity-Demand method in which costs are proportionately allocated to each customer category based on their peak demand. Although the two methods vary in the way that costs are allocated, both result in rates designed to recover the reasonable cost of service during periods of both average and peak demands.

The prior study allocated expenses using the base-extra capacity method. BWA reviewed the methodology and updated the allocations with substantial input from City staff. The base-extra capacity method examines each operating, maintenance, and capital expense for all the water system facilities and assigns it to the base (operations and capital to provide service to the average demand), extra capacity (to provide service to the peak demand), water supply, customer costs, equivalent meter, and fire protection. The demand characteristics of each customer category are then broken down to the base-extra capacity components.

Allocation of Costs to Functional Cost Components

The total cost of water service is analyzed by system function to proportionately distribute costs of service to the various customer categories. Table 15 shows a summary distribution of the water system's expenses using a 6-year average including the budget year 2013/14 through the 2018/19. The GWP's Five-Year Plan was evaluated by each line item and assigned to base, extra-capacity (maximum), water supply, fire protection, meters and services, and customer service categories.

Variable Costs

Base Costs are costs that vary with water use under average demand conditions. Base costs represent the costs that would be incurred if water consumption occurred evenly from day to day and from hour to hour, so that the system did not need extra capacity to meet peak period demands.

Max/Extra Capacity costs represent expenditures incurred to meet water demands that exceed average (base) levels of use by system customers. Extra-capacity costs are incurred because of water use variations and peak demands of customers. Storage facilities, for example, are designed and constructed to meet demands during peak periods.

Water Supply includes costs for both groundwater and water purchased from MWD. Groundwater expenses include pumping and the production of groundwater including labor, utilities, and facilities. MWD costs are attributable to the direct and indirect costs of purchased water.

Fixed Costs

Customer Accounts and **Meters & Services** are the costs expended in serving customers regardless of water demand. Meter reading and maintenance, billing, and customer services are examples of customer costs. Customer-related costs are usually divided into two subcategories: Customer Accounts and Meters & Services.

The Customer Accounts subcategory is for requirements related to the number of customers (for example, customer service, meter reading, and billing).

The Meters & Services category is for costs related to the customer meters (for example, meter maintenance and replacement) and service connection from the local main. Equivalent meters are the number of meters of each size expressed in terms of the number of ¾-inch meters that would provide equivalent hydraulic capacity.

Fire Protection includes expenses related to direct fire flow and protection. These costs include both private and public fire protection and include costs associated with hydrants, private fire services, and the additional capacity required in the system to accommodate fire flow in case of an emergency.

Table 15. Allocation of Expenses

Part				VARIABL			FI	XED COSTS	
Page-1982 Page		6-Year Ave	Base - Va	ariable		- Variable			Fire
The control of the co	Expenses Category		Base	Max		MWD			
Special Company Special Co	POTABLE WATER OPERATION & MAINTENANCE								
Contraction Peakles Williams Treat Four Pearly 1,000,007 1									
Department Pearls No. Processor Control 1,100,207 137,709									\$51,369
Contraction Problems for Published for Reads 145-0218 0 0 0 0 1970-1970 19									0
Cyclestion Fundame Water Minoclemons 17,888 20,005 13,000 10,000									189.022
Secretary Activities			-						10,349
Contention of Gleman Face 11,060									0
December									0
Substitution Company	•								0
Procedure Services Applications									250.740
Montemance of Probable Water Community 20,000 0 0 0 0 0 0 0 0	Subtotal Potable Water Operation	24,731,333	330,101	054,552	1,043,520	21,023,131	· ·	377,230	230,740
Montemance Probable With Production & Pumping 127,607 60,417 64,417	Potable Water Source Maintenance								
Modelstonines 15-200 15-200 15-200 15-200 0 0 0 0 0 0 0 0 0									0
Substitute Number Number Substitute Number 1973,131 80,021 133,021 80,021 0 0 0 0 0 0 0 0 0					. ,	. ,			0
PRIABLE VIDEO TO TERRORISMO TO CONTROL TO TERRORISMO TO THE ALL TO THE AL									<u>0</u>
Monitoriance Polsade Water Reservor & Tracks 174,813 21,357 34,552 41,392 11,377 0 275,500 11,000 0 0 0 0 0 0 0 0 0	Subtotal Fotable Water Source Maintenance	3/3,133	80,021	60,021	133,071	50,021	· ·	· ·	
Monitorium Probable Work Polants 178,081 99,718 146,795 178,1515 99,383 0 277,333 4,685 188,081 178,081	Potable Water Transmission & Distribution Mtc								
Montemance Posible Water Applicants 23,63,600 0 0 0 0 0 22,625						-,-			10,706
Moletemanne Postale Water Services 33,267 0 0 0 0 0 353,677 2,000,000 113,747 120,000 173,900 113,747 120,000 120,740 114,747 120,000 120,74						,			45,485
Maintenance Probable Valver Mode:									
									0
Maintenance Possible Water Min: 1.218.567 1.208.018								1.131.725	302,041
Same From From Prof. Manuferseries 7,200 917 1,488 2,400 0 0 2,400 1	The state of the s	_,020,030	112,033	101,047	120,001	, 3,300	J	-,,	202,041
Timestandares	Maintenance Potable Water Misc								73,114
135-1217 125-745 263-296 300-580 95-945 0 44-0014 73.11 700-407/IAIR WATER OPERATION & MAINITENANCE 28,496-533 912-962 1,218,989 2,229-962 21,274,072 0 2,135.009 625-96 Recycled Water Footies 197,987 22,139 40,701 65,995 0 0 0 0 65,995 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Smart Grid Maintenance								0
TOTAL POTABLE WATER OPERATION & MAINTENANCE PROCESSOR DUTTE OFFICE AT COMMITTENANCE PR	Fiber Maintenance								<u>0</u>
RECYCLED WATER OPERATION & AMANTENANCE Destration Recycled Water Misce Recycled Water Misco Recycled Water Misco Recycled Water Misco Recycled Wate	Suprotal	1,351,217	162,745	263,289	330,580	95,454	0	426,034	73,114
RECYCLED WATER OPERATION & AMANTENANCE Destration Recycled Water Misce Recycled Water Misco Recycled Water Misco Recycled Water Misco Recycled Wate	TOTAL POTABLE WATER OPERATION & MAINTENANCE	28.496.533	912.962	1,218,989	2,329,652	21,274,027	0	2,135,009	625.895
Recycled Water Facilities		20,430,333	312,302	1,210,309	2,323,032	22,274,027		2,233,009	023,033
Operation Recycled Water Powerfor Funging 32,0317 40,787 65,956 106,772 0 106,772 106,787 106,787 106,787 106,787 106,787 106,787 106,787 106,787 106,787 106,772 106,787	RECYCLED WATER OPERATION & MAINTENANCE								
Departion Recycled With Flower for Pumping 230,317 0,772 0,015,772 0 10,772 0,0 0,0 15,756 0,0 0,0 15,756 0,0 0,0 15,756 0,0									
Dezertion Recycled Water Marce Dezertion \$3,088 4.927 8,055 13,028 0 13,028 0 130,028 18,775 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 18,776 0 0 0 18,776 0 0 0 18,776 0 0 0 0 0 0 0 0 0									0
Satoral Recycled Water Source Maintenance S7,267 70,959 114,797 185,756 0 0 185,756 1 1 1 1 1 1 1 1 1									0
Recycled Water Source Maintenance Maintenance Recycled Water Fource Maintenance 222,383 29,590 47,871 77,461 0 0 77,461 0 0 77,461 0 0 77,461 0 0 77,461 0 0 77,461 0 0 77,461 0 0 77,461 0 0 77,461 0 0 77,461 0 0 77,461 0 0 77,461 0 0 0 77,461 0 0 0 77,461 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									0
Maintenance Recycled Water Frame 223,383 29,590 47,871 77,461 0 0 77,461 0	Subtotal Necycles Water Operation	337,207	70,555	114,757	103,730	ŭ	ŭ	103,730	·
Sabtotal Recycled Water Survive Maintenance Recycled Water Survive Maintenance Recycled Water Mains	Recycled Water Source Maintenance								
Recycled Water Transmission & Distribution Mic Maintenance Recycled Water Mains 11,767 1,498 2,424 3,922 0 0 3,311 0 0 3,311 0 0 3,322 0 0 0 3,322 0 0 0 3,322 0 0 0 3,322 0 0 0 3,322 0 0 0 3,322 0 0 0 3,322 0 0 0 3,322 0 0 0 3,322 0 0 0 3,322 0 0 0 3,322 0 0 0 3,322 0 0 0 3,322 0 0 0 3,322 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									0
Maintenance Recycled Water Feet Tamis Maintenance Recycled Water Minis 11,767 1,1769 1,1767 1,1769 1,1767 1,1769 1,1769 1,1767 1,1769 1	Subtotal Recycled Water Source Maintenance	232,383	29,590	47,871	77,461	0	0	77,461	0
Maintenance Recycled Water Feet Tamis Maintenance Recycled Water Minis 11,767 1,1769 1,1767 1,1769 1,1767 1,1769 1,1769 1,1767 1,1769 1	Donald Material Transmission & District Materials								
Maintenance Recycled Water Mains 11,767 1,498 2,424 3,922 0 0 3,922 1,755		9 933	1 265	2.046	3 311	0	0	3 311	0
Maintenance Recycled Water Hydrards									0
Maintenance Recycled Water Meters 26,317 0 0 0 0 0 2,6172 1		717	0	0	0	0	0	0	717
Subtoal Recycled Water Trans & Distrib. Mic \$2,9617 3,771 6,101 9,972 0 0 9,872 0 TOTAL RECYCLED WATER OPERATION & MAINTENANCE \$72,501 107,083 173,239 280,322 0 0 310,889 71 TOTAL RECYCLED WATER OPERATION & MAINTENANCE \$72,501 0 0 0 0 0 0 0 1,450,185 92,566 Water Services Engineering 1,542,750 0 0 0 0 0 0 0 1,450,185 92,566 AMS Support \$71,502 0 0 0 0 0 0 0 0 1,450,185 92,566 AMS Support \$71,502 0 0 0 0 0 0 0 0 1,450,185 92,566 AMS Support \$71,503 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									0
Maintenance Recycled Water Misc 29,617 3,771 6,101 9,872 0 0 9,872 0 TOTAL RECYCLED WATER OPERATION & MAINTENANCE 872,250 107,083 173,239 280,322 0 0 0 310,889 71 OTHER WATER OPERATION & EMAINTENANCE 872,250 10,7083 173,239 280,322 0 0 0 310,889 71 OTHER WATER OPERATION & EMAINTENANCE 872,250 0 0 0 0 0 0 0 0 0 0 0 537,277 34,289 Small Tools Expense 72,337 0 0 0 0 0 0 0 0 537,277 34,289 Small Tools Expense 72,337 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									<u>0</u>
TOTAL RECYCLED WATER OPERATION & MAINTENANCE 872,250 107,083 173,239 280,322 0 0 3310,889 71 OTHER WATER OPERATION & MAINTENANCE STATES 15,427,50 0 0 0 0 0 0 0 1,450,185 92,56 Mail Tools Expense 72,317 0 0 0 0 0 0 0 0 7,375,73 34,285 Small Tools Expense 72,317 0 0 0 0 0 0 0 0,7978 4,33 OTHER WATER OPERATION & MAINTENANCE EXPENSES 8,961,833 967,888 967,	Subtotal Recycled Water Trans & Distrb. Mtc	52,983	2,763	4,470	7,233	0	0	37,800	717
TOTAL RECYCLED WATER OPERATION & MAINTENANCE 872,250 107,083 173,239 280,322 0 0 3310,889 71 OTHER WATER OPERATION & MAINTENANCE STATES 15,427,50 0 0 0 0 0 0 0 1,450,185 92,56 Mail Tools Expense 72,317 0 0 0 0 0 0 0 0 7,375,73 34,285 Small Tools Expense 72,317 0 0 0 0 0 0 0 0,7978 4,33 OTHER WATER OPERATION & MAINTENANCE EXPENSES 8,961,833 967,888 967,	Maintenance Recycled Water Misc	29.617	3 771	6 101	9.872	0	0	9 872	0
## OF THE WATER OPERATING EXPENSES Water Services Engineering 1,542,750 0 0 0 0 0 0 0 0 0 373,287 34,282 Small Tools Expenses 72,317 0 0 0 0 0 0 0 0 753,287 34,283 Small Tools Expenses 72,317 0 0 0 0 0 0 0 0 753,287 34,283 FOR THE WATER OPERATING EXPENSES 8,961,833 967,888 967	mantenance necycled water was	25,017	3,772	0,101	3,072	ŭ	Ü	3,072	Ü
Marter Services Engineering 1,542,750 0 0 0 0 0 0 1,450,185 92,556	TOTAL RECYCLED WATER OPERATION & MAINTENANCE	872,250	107,083	173,239	280,322	0	0	310,889	717
Marter Services Engineering 1,542,750 0 0 0 0 0 0 1,450,185 92,556									
AMI Support		4 5 42 750						4 450 405	02.565
Small Tools Expense 72,317 0 0 0 0 0 0 0 7,978 4.33 00 0 0 0 0 7,978 4.33 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
Other Water Services Operating Expenses 6,775,217 967,888									4,339
TOTAL WATER OPERATION & MAINTENANCE EXPENSE TOTAL WATER OPERATION & MAINTENANCE EXPENSES Tansfers to Other Funds 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Other Water Services Operating Expenses		967,888	967,888	967,888	967,888	967,888		967,888
WATER SERVICES NON-OPERATING EXPENSES Transfers to Other Funds 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL OTHER WATER OPERATING EXPENSES	8,961,833	967,888	967,888	967,888	967,888	967,888	3,023,308	1,099,085
WATER SERVICES NON-OPERATING EXPENSES Transfers to Other Funds 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
Transfers to Other Funds 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL WATER OPERATION & MAINTENANCE EXPENSE	38,330,617	1,987,933	2,360,116	3,577,862	22,241,915	967,888	5,469,206	1,725,697
Transfers to Other Funds 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
Water System Plant Depreciation 5,853,217 700,591 1,133,417 1,375,506 488,502 0 1,834,008 351,19 (6m) Depreciation of Geni Fac (Wtr 32%) 39,674 64,185 77,895 25,565 0 103,860 19,88 (7m) Depreciation of Geni Fac (Wtr 32%) 39,674 64,185 77,895 25,565 0 103,860 19,88 (7m) Depreciation of Geni Fac (Wtr 32%) 39,674 64,185 77,895 25,565 0 103,860 19,88 (7m) Depreciation of Geni Fac (Wtr 32%) 39,674 64,185 77,895 25,565 0 103,860 19,88 (7m) Depreciation of Geni Fac (Wtr 32%) 39,674 102,551 0 410,266 78,555 10 410,266	WATER SERVICES NON-OPERATING EXPENSES								
Supplementation of Genifac (Wtr 32%) 331,467 336,674 641,85 77,895 25,965 0 103,860 19,88 Principal - 2008 Bonds 1,309,167 156,699 253,507 307,654 102,551 0 410,206 78,555 18,22 11,027 0 44,289 32,006 10,006 78,006 10,006 78,006 10,006	Transfers to Other Funds	0	0	0	0	0	0	0	0
Principal - 2008 Bonds	Water System Plant Depreciation								351,193
Interest 2,008 Bonds									19,888
Principal - 2012 Bonds									
Interest									
Bond Sale Expense - 2008 Bonds	Interest - 2012 Bonds								71,612
Bond Sale Expense - 2012 Bonds 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Bond Sale Expense - 2008 Bonds								2,584
Miscellaneous Non-Operating Expense Q Q Q Q Q Q Q Q Q	Bond Sale Expense - 2012 Bonds								0
TOTAL WATER SERVICES NON-OPERATING EXPENSES 11,179,267 1,338,084 2,164,753 2,627,128 875,709 0 3,502,837 670,759 WATER FUND ALLOCATIONS/EXPENSES General Plant Allocation 182,250 45,563	Gladys Drive Reimbursement								10,000
WATER FUND ALLOCATIONS/EXPENSES General Plant Allocation 182,250 45,563 45,563 45,563 45,563 0 0 0 0 2,890,233 0 0 0 0 2,890,233 0 0 0 0 0 2,890,233 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									670.756
182,250 45,563 45,563 45,563 0 0 0 0 0 0 0 0 0	TOTAL WATER SERVICES NON-OPERATING EXPENSES	11,179,267	1,338,084	2,164,753	2,627,128	8/5,709	0	3,502,837	ь/0,756
182,250 45,563 45,563 45,563 0 0 0 0 0 0 0 0 0									
182,250 45,563 45,563 45,563 0 0 0 0 0 0 0 0 0	WATER FUND ALLOCATIONS/EXPENSES								
TOTAL WATER FUND ALLOCATIONS/EXPENSES 3,072,483 45,563 45,563 45,563 45,563 45,563 45,563 2,890,233 0 CAPITAL PROJECTS Bond Funded 4,576,990 547,835 886,288 1,075,593 358,531 0 1,434,124 274,611 PayGo [2] 2,308,719 276,338 447,060 542,549 1,618,142 539,381 0 2,157,522 131,141 TOTAL WATER SYSTEM EXPENSES 559,468,076 \$4,195,753 \$5,903,781 \$7,868,694 \$23,702,567 \$3,858,121 \$11,129,565 \$2,809,599 \$4,100,710 \$7,1% 9,9% 13,2% 39,9% 6,5% 18,7% 4,79	General Plant Allocation								0
CAPITAL PROJECTS Bond Funded	Customer Service Expense								0
Bond Funded 4,576,990 547,835 886,288 1,075,593 358,531 0 1,434,124 274,611 PayGo (2) 2,308,719 276,338 447,060 522,549 180,850 0 723,399 138,52 TOTAL CAPITAL PROJECTS 6,885,709 824,173 1,333,349 1,618,142 539,381 0 2,157,522 413,14 TOTAL WATER SYSTEM EXPENSES 559,468,076 \$4,195,753 \$5,903,781 \$7,868,694 \$23,702,567 \$3,858,121 \$11,129,565 \$2,809,599 % ALLOCATION 7,1% 9,9% 13,2% 39,9% 6,5% 18,7% 4,79	TOTAL WATER FUND ALLOCATIONS/EXPENSES	3,072,483	45,563	45,563	45,563	45,563	2,890,233	0	0
Bond Funded 4,576,990 547,835 886,288 1,075,593 358,531 0 1,434,124 274,611 PayGo (2) 2,308,719 276,338 447,060 522,549 180,850 0 723,399 138,52 TOTAL CAPITAL PROJECTS 6,885,709 824,173 1,333,349 1,618,142 539,381 0 2,157,522 413,14 TOTAL WATER SYSTEM EXPENSES 559,468,076 \$4,195,753 \$5,903,781 \$7,868,694 \$23,702,567 \$3,858,121 \$11,129,565 \$2,809,599 % ALLOCATION 7,1% 9,9% 13,2% 39,9% 6,5% 18,7% 4,79									
PayGo (2) 2,308,719 2,76,338 447,060 542,549 180,850 0 723,399 138,52 TOTAL CAPITAL PROJECTS 6,885,709 824,173 1,333,349 1,618,142 539,381 0 2,157,522 413,14 TOTAL WATER SYSTEM EXPENSES \$59,468,076 \$4,195,753 \$5,903,781 \$7,868,694 \$23,702,567 \$3,858,121 \$11,129,565 \$2,809,591 % ALLOCATION 7.1% 9.9% 13.2% 39.9% 6.5% 18.7% 4.75	CAPITAL PROJECTS								
TOTAL CAPITAL PROJECTS 6,885,709 824,173 1,333,349 1,618,142 539,381 0 2,157,522 413,14 TOTAL WATER SYSTEM EXPENSES \$59,468,076 \$4,195,753 \$5,903,781 \$7,868,694 \$23,702,567 \$3,858,121 \$11,129,565 \$2,809,599 % ALLOCATION 7.1% 9.9% 13.2% 39.9% 6.5% 18.7% 4.79	Bond Funded								274,619
TOTAL WATER SYSTEM EXPENSES \$59,468,076 \$4,195,753 \$5,903,781 \$7,868,694 \$23,702,567 \$3,858,121 \$11,129,565 \$2,809,599 **ALLOCATION 7.1% 9.9% 13.2% 39.9% 6.5% 18.7% 4.79	PayGo (2)								138,523
% ALLOCATION 7.1% 9.9% 13.2% 39.9% 6.5% 18.7% 4.7	TOTAL CAPITAL PROJECTS	6,885,709	824,173	1,333,349	1,618,142	539,381	0	2,157,522	413,143
% ALLOCATION 7.1% 9.9% 13.2% 39.9% 6.5% 18.7% 4.7									
	TOTAL WATER SYSTEM EXPENSES	\$59,468,076	\$4,195,753	\$5,903,781	\$7,868,694	\$23,702,567	\$3,858,121	\$11,129,565	\$2,809,595
	% ALLOCATION	'	7.1%	9.9%	13.2%	39.9%	6.5%	18.7%	4.7%

Revenues derived from sources other than water rates are applied toward reducing cost recovery from water rates. Based on the cost allocations as shown on Table 15, the water rates are designed to recover 30% of rate revenues from the fixed customer charges and 70% of rate revenues from the variable charges. The resulting distribution percentages are used to apportion annual revenue requirements to each cost component as shown on Table 16.

Table 16. Base Scenario: Annual Revenue Requirements Allocation by Cost Component

	Allocation	Base Year			Five-Year Plan		
	%	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19

ANNUAL REVENUE REQUIREMENT		4.6	******	4-4	4=0==4		4=0.400.000
Annual Revenue Requirement (from Cash Flow)		\$46,472,200	\$49,040,000	\$51,207,000	\$53,521,000	\$55,940,000	\$58,468,000
REVENUE RECOVERY							
Fixed Revenue Recovery	29.9%	\$13,907,946	\$14,676,424	\$15,324,952	\$16,017,473	\$16,741,418	\$17,497,984
Variable Revenue Recovery	70.1%	\$32,564,253	\$34,363,576	\$35,882,048	\$37,503,527	\$39,198,582	\$40,970,016
Total	100.0%	\$46,472,200	\$49,040,000	\$51,207,000	\$53,521,000	\$55,940,000	\$58,468,000
FIXED REVENUE REQUIREMENT							
Customer Accounts	6.5%	\$3,014,986	\$3,181,577	\$3,322,166	\$3,472,292	\$3,629,230	\$3,793,239
Meters and Services	18.7%	\$8,697,362	\$9,177,930	\$9,583,488	\$10,016,558	\$10,469,279	\$10,942,399
Fire Protection	4.7%	\$2,195,599	\$2,316,916	\$2,419,297	\$2,528,623	\$2,642,910	\$2,762,346
TOTAL FIXED REVENUE REQUIREMENT	29.9%	\$13,907,946	\$14,676,424	\$15,324,952	\$16,017,473	\$16,741,418	\$17,497,984
TOTAL TIMES NEVEROL NEGOTIENT	23.370	\$13,507,540	Ş14,070,424	ψ13,324,332	710,017,473	710,741,410	Ų17, 1 37,304
VARIABLE REVENUE REQUIREMENT							
BASE VARIABLE							
Base	7.1%	\$3,278,832	\$3,460,003	\$3,612,895	\$3,776,158	\$3,946,830	\$4,125,192
Max	9.9%	\$4,613,596	\$4,868,518	\$5,083,650	\$5,313,376	\$5,553,526	\$5,804,497
Subtotal Base Variable	17.0%	\$7,892,428	\$8,328,521	\$8,696,545	\$9,089,534	\$9,500,356	\$9,929,689
WATER COST VARIABLE							
Groundwater	13.2%	\$6,149,106	\$6,488,872	\$6,775,605	\$7,081,789	\$7,401,866	\$7,736,366
MWD	<u>39.9%</u>	<u>\$18,522,719</u>	\$19,546,183	\$20,409,898	\$21,332,203	\$22,296,360	\$23,303,961
Subtotal Water Cost Variable	53.1%	\$24,671,825	\$26,035,055	\$27,185,503	\$28,413,993	\$29,698,226	\$31,040,327
TOTAL VARIABLE REVENUE REQUIREMENT	70.1%	\$32,564,253	\$34,363,576	\$35,882,048	\$37,503,527	\$39,198,582	\$40,970,016

Allocation of Costs to Customer Categories

The functional cost components are allocated to each customer category based on their proportionate demand of each function.

Variable Costs

Base Costs are allocated on the basis of the annual average demand of each class. Average demand is calculated by dividing each individual customer category's use by total annual consumption.

Max/Extra Capacity costs are allocated to each class in proportion to the extra demands put on the water system beyond the average water use. Extra demand is commonly expressed as ratios of the respective peak demand to annual average demand called peaking factors.

Water Supply costs are allocated to the individual customer category based on average demand. As previously noted the GWP's water supply is a combination of groundwater, recycled water, and purchased water from MWD. For potable water, the actual water when delivered to customers is a blend of groundwater and purchased water.

Fixed Costs

Customer Account and **Fire Protection** costs are allocated in proportion to the number of customers or bills in each class.

Meters & Services are allocated according to the number of equivalent meters by class. Larger meters place a higher demand on the system due to a higher capacity and flow rate.

Peaking Factors

In order to provide adequate service to its customers at all times, the water system must be capable of not only providing the average amount of water used, but also supplying water at peak or maximum rates of demand. Therefore, rates are designed to recover system expenses needed to provide both average and peak use. BWA analyzed 2012/13 water consumption data to evaluate each customer category's proportionate demand on the system. Water consumption patterns over the course of a year show that each customer category has different peak demands.

Table 17 calculates average (base) and peak (max) factors which are used to allocate variable costs between each customer category. The peak ratio is calculated by taking the highest use month over average annual use and represents the extra demand that each customer category places on the system during times of maximum water demand.

Table 17. Average (Base) and Peak (Max) Ratios by Customer Category

				Base	(1)	Max Da	ıy (2)
Category Description	Average Month	Peak Month	Peaking Factor (Peak/Avg)	2012/13 Consumption	% of Average	Peaking (4)	% of Peak
City Of Glendale (3)	22,110	45,657	2.06	265,322	2.2%	546,563	2.8%
Commercial Business (3)	112,560	171,177	1.52	1,350,724	11.2%	2,053,100	10.6%
Commercial W/Master-Metered Water (Business)	4,470	6,571	1.47	53,637	0.4%	78,846	0.4%
Common Use Areas For Apartment Or Condos	129,799	181,014	1.39	1,557,585	13.0%	2,165,043	11.1%
Common Use Electric/Water For Businesses	2,325	3,070	1.32	27,897	0.2%	36,824	0.2%
Condominium Units	4,209	5,997	1.42	50,510	0.4%	71,724	0.4%
No Facility (3)	1,286	2,574	2.00	15,427	0.1%	30,854	0.2%
Industrial - Large Business	24,739	29,642	1.20	296,866	2.5%	356,239	1.8%
Irrigation Meters (3)	46,060	84,954	1.84	552,720	4.6%	1,017,005	5.2%
Master-Metered Residential	11,205	12,995	1.16	134,462	1.1%	155,976	0.8%
Multi-Family Residential	36,403	49,768	1.37	436,830	3.6%	598,457	3.1%
Multi-Family W/Master-Metered Water	184,843	271,020	1.47	2,218,119	18.5%	3,260,635	16.8%
Public Authority	1,839	4,028	2.19	22,068	0.2%	48,329	0.2%
Single Family Residential	400,973	727,966	1.82	4,811,675	40.1%	8,757,249	45.0%
Small Business	18,188	22,720	1.25	218,257	1.8%	272,821	1.4%
Total	•	•		12,012,100	100.0%		100.0%

Customer Classifications							
Single Family	400,973	727,966	1.82	4,811,675	40.1%	8,757,249	45.0%
Multi-Family	366,459	520,796	1.42	4,397,506	36.6%	6,251,835	32.1%
Commercial	187,517	285,440	1.52	2,250,198	18.7%	3,423,576	17.6%
Irrigation	46,060	84,954	1.84	552,720	4.6%	1,017,005	5.2%
Total				12,012,099	100.00%		100.00%

 $[\]ensuremath{\mathsf{1}}$ - Percentages used to allocate base costs to each customer class

As shown on Table 18, the "% of Average" percentages are used to allocate the base cost amongst the customer categories, and the "% of Peak" percentages are used to allocate the max/extra capacity costs amongst the customer categories. These percentages represent each customer classification's share of Base and Max costs. The peaking factors for single family and multi-family residential categories are used to further allocate the Base and Max costs amongst the tiers.

^{2 -} Percentages used to allocate max day costs to each customer class

^{3 -} Includes recycled water consumption

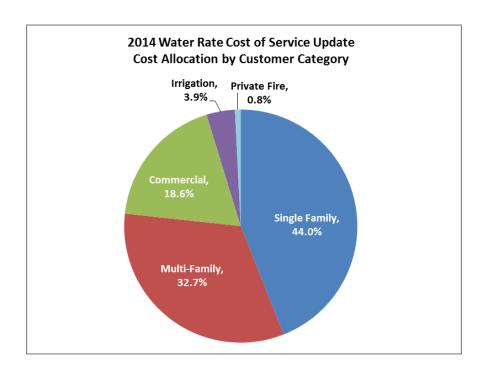
^{4 -} Average use times peaking factor

Table 18. Base Scenario: Allocation of Base and Max Day Costs

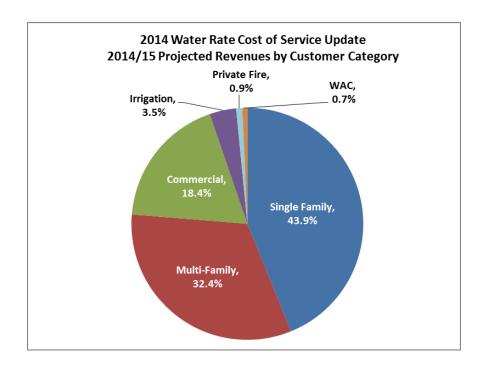
	Allocation			Five-Year Plan		
	%	2014/15	2015/16	2016/17	2017/18	2018/19
COSTS ALLOCATED TO BASE + MAX DAY		\$6,546,193	\$6,835,459	\$7,213,093	\$7,611,551	\$8,032,034
BASE COST ALLOCATION	% of Average					
Single Family	40.1%	\$1,008,214	\$1,052,765	\$1,110,927	\$1,172,295	\$1,237,056
Multi-Family	36.6%	\$921,430	\$962,146	\$1,015,301	\$1,071,387	\$1,130,574
Commercial	18.7%	\$471,500	\$492,335	\$519,534	\$548,234	\$578,520
Irrigation	4.6%	\$115,805	\$120,922	\$127,603	\$134,651	\$142,090
Total	100.0%	\$2,516,948	\$2,628,168	\$2,773,365	\$2,926,568	\$3,088,240
MAX ALLOCATION	% of Peak					
Single Family	45.0%	\$1,814,167	\$1,894,333	\$1,998,988	\$2,109,413	\$2,225,943
Multi-Family	32.1%	\$1,295,160	\$1,352,391	\$1,427,106	\$1,505,941	\$1,589,133
Commercial	17.6%	\$709,228	\$740,567	\$781,481	\$824,651	\$870,207
Irrigation	5.2%	\$210,689	\$219,999	\$232,153	\$244,978	\$258,511
Total	100.0%	\$4,029,245	\$4,207,290	\$4,439,728	\$4,684,983	\$4,943,794
TOTAL BASE + MAX ALLOCATION	% of Total					
Single Family	43.1%	\$2,822,381	\$2,947,098	\$3,109,914	\$3,281,709	\$3,463,000
Multi-Family	33.9%	\$2,216,590	\$2,314,538	\$2,442,407	\$2,577,328	\$2,719,707
Commercial	18.0%	\$1,180,728	\$1,232,902	\$1,301,015	\$1,372,885	\$1,448,727
Irrigation	5.0%	\$326,494	\$340,921	\$359,756	\$379,629	\$400,601
Total	100.0%	\$6,546,193	\$6,835,459	\$7,213,093	\$7,611,551	\$8,032,034

Revenue Recovery by Customer Category

The following charts illustrate the allocation of water system costs to each customer category. Approximately 44 percent of costs are allocated to single family residential customers who represent the largest customer category.



As shown below, the projected revenues from each customer category reflect the allocation of costs to each respective class.



SECTION 5: RATE DESIGN

The final step of the water rate study process is the design of water rates to generate the level of revenues needed to meet annual revenue requirements. The evaluation of rate structure alternatives takes into account both the level of rate increases and the structure of the rates. The level of increases refers to the amount of revenue to be collected from a specific rate design. The rate structure refers to the way in which the revenues are collected from the customers.

Rate Development Principles

In reviewing rate structure options, BWA uses the following criteria in developing our recommendations:

- 1. *Revenue Sufficiency:* Rates should recover the annual cost of service and provide revenue stability.
- 2. *Proportionality:* Rates should be proportionately allocated among all customer category based on their estimated demand characteristics, i.e. each user category only pays its proportionate share.
- 3. *Practical*: Rates should be simple in form and, therefore, adaptable to changing conditions, easy to administer, and easy to understand.
- 4. *Provide Incentive:* Rates provide price signals which serve as indicators to use water efficiently.

Fixed Customer Charge

Fixed charges are comprised of the costs for Customer Accounts, Fire Protection, and Meters & Services. After reviewing the methodology used to calculate the customer charges in the 2012 Study, BWA updated the costs and meter counts associated with each component to recover costs from each meter proportion to meter capacity and the associated demand placed on the water system by each meter size.

Potable Water Fixed Customer Charges

The customer charge calculation for potable water is shown on Table 19. The fixed customer charges are comprised of the costs for Customer Accounts, Public Fire Protection, and Meters & Services. Customer Account and Public Fire Protection costs are distributed to each meter evenly. Meters & Services expenditures are allocated according to the total number of equivalent potable and recycled meters as larger meters place a higher demand on the system due to a higher capacity and flow rate.

As detailed in Section 2, the equivalent meter ratios have been updated to reflect meter capacity per the Badger Meter specifications. These updated ratios are closely aligned to the City's cost of providing service as they are based on actual meter capacity.	

Table 19. Base Scenario: Potable Water - Fixed Charge Calculation

		Base Year			Five-Year Plan		
		2013/14	2014/15 (1)	2015/16	2016/17	2017/18	2018/19
	F	IXED CUSTOME	R CHARGE CAL	LCULATION			
CUSTOMER ACCOUNTS	COSTS						
Total Customer Accounts C	ost	\$3,014,986	\$3,181,577	\$3,322,166	\$3,472,292	\$3,629,230	\$3,793,239
No. of Meters/Lines (Potab	le, Recycled & Private Fire)	34,496	34,668	34,842	35,016	35,191	35,367
Annual CA Charge per Acco	ount	\$87.40	\$91.77	\$95.35	\$99.16	\$103.13	\$107.25
Number of Months		12	12	12	12	12	12
Monthly CA Charge per Acc	count	\$7.28	\$7.65	\$7.95	\$8.26	\$8.59	\$8.94
PUBLIC FIRE PROTECTIO		4	4			4	
Total Public Fire Protection		\$1,820,152	\$1,920,723	\$2,005,597	\$2,096,228	\$2,190,972	\$2,289,985
No. of Meters (Potable & F		33,435	33,602	33,770	33,939	34,109	34,279
Annual PFP Charge per Acc	ount	\$54.44	\$57.16	\$59.39	\$61.76	\$64.23	\$66.80
Number of Months		12	12	12	12	12	12
Monthly Public Fire Charg	e per Account	\$4.54	\$4.76	\$4.95	\$5.15	\$5.35	\$5.57
METERS AND SERVICES	COSTS						
Total Meters and Services C	Cost	\$8,697,362	\$9,177,930	\$9,583,488	\$10,016,558	\$10,469,279	\$10,942,399
No. of Equivalent Meters (F	otable & Recycled)	54,449	54,721	54,995	55,270	55,546	55,824
Monthly Meter Charge pe	r 3/4" Meter	\$13.31	\$13.98	\$14.52	\$15.10	\$15.71	\$16.33
Meter Size	Eq Meter Factor			onthly Meters and	Services Charge		
5/8"	0.60	\$7.99	\$8.39	\$8.71	\$9.06	\$9.43	\$9.80
3/4"	1.00	\$13.31	\$13.98	\$14.52	\$15.10	\$15.71	\$16.33
1"	1.60	\$21.30	\$22.37	\$23.23	\$24.16	\$25.14	\$26.13
1 1/2"	3.20	\$42.59	\$44.74	\$46.46	\$48.32	\$50.27	\$52.26
2"	4.00	\$53.24	\$55.92	\$58.08	\$60.40	\$62.84	\$65.32
3"	16.00	\$212.96	\$223.68	\$232.32	\$241.60	\$251.36	\$261.28
4"	32.00	\$425.92	\$447.36	\$464.64	\$483.20	\$502.72	\$522.56
6"	60.00	\$798.60	\$838.80	\$871.20	\$906.00	\$942.60	\$979.80
8"	140.00	\$1,863.40	\$1,957.20	\$2,032.80	\$2,114.00	\$2,199.40	\$2,286.20
10"	220.00	\$2,928.20	\$3,075.60	\$3,194.40	\$3,322.00	\$3,456.20	\$3,592.60
12"	220.00	\$2,928.20	\$3,075.60	\$3,194.40	\$3,322.00	\$3,456.20	\$3,592.60
TOTAL FIXED CUSTOME	D CHARGE						
TOTAL TIALD COSTONIL	CHARGE	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
	Meter Size			onthly Meters and	Services Charge	<u> </u>	
	5/8"	\$19.80	\$20.80	\$21.61	\$22.47	\$23.37	\$24.30
	3/4"	\$25.13	\$26.39	\$27.42	\$28.51	\$29.65	\$30.84
	1"	\$33.11	\$34.78	\$36.13	\$37.57	\$39.08	\$40.63
	1 1/2"	\$54.41	\$57.15	\$59.36	\$61.73	\$64.21	\$66.76
	2"	\$65.06	\$68.33	\$70.98	\$73.81	\$76.78	\$79.83
	3"	\$224.78	\$236.09	\$245.22	\$255.01	\$265.30	\$275.79
	4"	\$437.74	\$459.77	\$477.54	\$496.61	\$516.66	\$537.07
	6"	\$810.42	\$851.21	\$884.10	\$919.41	\$956.54	\$994.31
	8"	\$1,875.22	\$1,969.61	\$2,045.70	\$2,127.41	\$2,213.34	\$2,300.71
	10"	\$2,940.02	\$3,088.01	\$3,207.30	\$3,335.41	\$3,470.14	\$3,607.11

Recycled Water Fixed Customer Charges

The recommended fixed customer charge for recycled water customers is a 15 percent discount from the potable water fixed charge. The discount provides incentive for customers to use recycled water which reduces overall system dependency on other potable water sources.

Private Fire Line Customer Charges

The costs for fire protection are allocated between public and private fire based on the number of public fire hydrants and the number of private fire line connections as shown on Table 20. The costs allocated to public fire protection are included in the potable and recycled water fixed customer charges as shown on Table 20.

Table 20. Fire Protection Allocation between Public and Private Fire

			Fire Service Equivalent	% of Total Fire
	Number in Service	Demand Factor	Connections	Protection Costs
PUBLIC FIRE SERVICE				
Total Public Hydrants	3,143	111.31	349,850	82.9%
PRIVATE FIRE SERVICE (Connection Size, inches)		
Size (inches)				
2	48	6.19	297	
3	2	17.98	36	
4	712	38.32	27,283	
6	215	111.31	23,932	
8	81	237.21	19,214	
10	2	426.58	853	
12	<u>1</u>	689.04	<u>689</u>	
Total Private Fire Service			72,304	17.1%
Total Fire Meters	4,204		422,154	100.0%

	Allocation %	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Total Costs Allocated to Fire Protection		\$2,195,599	\$2,316,916	\$2,419,297	\$2,528,623	\$2,642,910	\$2,762,346
Costs Allocated to Public Fire	82.9%	\$1,820,152	\$1,920,723	\$2,005,597	\$2,096,228	\$2,190,972	\$2,289,985
Costs Allocated to Private Fire	17.1%	\$375,447	\$396,193	\$413,700	\$432,395	\$451,938	\$472,361

The private fire line charges derived in the 2012 Study added the charge for private fire protection to the potable meter charge, resulting in private fire line charges that are higher than the equivalent potable water meter charges. The current private fire line rates imply that the costs associated with private fire lines are actually higher than potable and recycled water meters and thereby exceed the proportional cost of service. The updated fire line calculation only includes the costs related to private fire protection and customer accounts, resulting in rates that are significantly lower.

Additionally, the prior study only included 289 private fire lines and did not include the 2" and 3" private fire lines. A thorough review of private fire lines confirmed that there are currently 1,061 private fire lines in the City. The updated rate includes all private fire lines in the rate derivation as shown on Table 21.

Table 21. Base Scenario: Private Fire Line – Fixed Charge Calculation

PRIVATE FIRE LINE CALCULATION										
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19				
FIRE PROTECTION COSTS										
Total Private Fire Protection Cost	\$375,447	\$396,193	\$413,700	\$432,395	\$451,938	\$472,361				
Number of Equivalent Lines (Private Fire Only)	72,305	72,666	73,030	73,395	73,762	74,131				
Monthly Charge per 1" Meter	\$0.43	\$0.45	\$0.47	\$0.49	\$0.51	\$0.53				

Size	Eq Meter Factor			Monthly Fire Se	rvice Costs		
1"	1.00	\$0.43	\$0.45	\$0.47	\$0.49	\$0.51	\$0.53
1-1/2"	2.90	\$1.25	\$1.31	\$1.36	\$1.42	\$1.48	\$1.54
2"	6.19	\$2.66	\$2.79	\$2.91	\$3.03	\$3.16	\$3.28
3"	17.98	\$7.73	\$8.09	\$8.45	\$8.81	\$9.17	\$9.53
4"	38.32	\$16.48	\$17.24	\$18.01	\$18.78	\$19.54	\$20.31
6"	111.31	\$47.86	\$50.09	\$52.32	\$54.54	\$56.77	\$58.99
8"	237.21	\$102.00	\$106.74	\$111.49	\$116.23	\$120.98	\$125.72
10"	426.58	\$183.43	\$191.96	\$200.49	\$209.02	\$217.56	\$226.09
12"	689.04	\$296.29	\$310.07	\$323.85	\$337.63	\$351.41	\$365.19
CUSTOMER ACCOUNTS							
Total Customer Accounts Cos	st	\$3,014,986	\$3,181,577	\$3,322,166	\$3,472,292	\$3,629,230	\$3,793,239
No. of Meters/Lines (Potable	, Recycled & Private Fire)	34,496	34,668	34,842	35,016	35,191	35,367
Annual Customer Account Ch	arge	\$87.40	\$91.77	\$95.35	\$99.16	\$103.13	\$107.25
Number of Months		12	12	12	12	12	12
Monthly Customer Account	t Charge	\$7.28	\$7.65	\$7.95	\$8.26	\$8.59	\$8.94

TOTAL FIRE LINE CHARGES (Private Fire Line + Customer Account)

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19					
Meter Size		Monthly Private Fire Line Charge									
1"	\$7.71	\$8.10	\$8.42	\$8.75	\$9.10	\$9.47					
1-1/2"	\$8.53	\$8.96	\$9.31	\$9.68	\$10.07	\$10.48					
2"	\$9.94	\$10.44	\$10.86	\$11.29	\$11.75	\$12.22					
3"	\$15.01	\$15.74	\$16.40	\$17.07	\$17.76	\$18.47					
4"	\$23.76	\$24.89	\$25.96	\$27.04	\$28.13	\$29.25					
6"	\$55.14	\$57.74	\$60.27	\$62.80	\$65.36	\$67.93					
8"	\$109.28	\$114.39	\$119.44	\$124.49	\$129.57	\$134.66					
10"	\$190.71	\$199.61	\$208.44	\$217.28	\$226.15	\$235.03					
12"	\$303.57	\$317.72	\$331.80	\$345.89	\$360.00	\$374.13					

Beginning on January 1, 2014, the City Council suspended fire line charges for fire lines 4" and greater in size in anticipation of Council's approval of the credits or refunds to the affected fire line customers. The total amount to be credited back to fire line customers is approximately \$3.4 million.

Variable Charge

Variable charges are levied on actual water use and recover the variable costs of providing water service.

2012 Residential Tiered Rates

The 2012 Study misapplied historical single family and multi-family consumption data when calculating the restructured tiered water rates by using the bimonthly customer usage data but applying it as monthly usage data when calculating the 2012 tiered rates. The consumption

analysis in the prior study overestimated the amount of water sold in each of the residential tiers resulting in a revenue shortfall of approximately \$9 million through June 30, 2014.

Revised Single Family Residential Variable Charge

Based on the current single family residential tier breakpoints, only 10 percent of water is sold in Tiers 4 and 5 tiers compared to the 2012 Study which estimated nearly 32 percent of water would be sold in the top 2 tiers.

Table 22 compares the amount of water sold in each single family tier for a) the 2012 Study, b) what the City is actually collecting and c) the recommended new tiers. Based on an updated analysis of water consumption, BWA recommends revising the single family tier breakpoints from the current 5 tiers to 4 tiers. The tier breakpoints are designed to provide a reasonable amount of water for efficient indoor and outdoor water use for a typical single family residential household. The inclining tiered rate structure reflects the proportionate increase in costs associated with additional demand placed on the system.

The recommended single family tier breakpoints are:

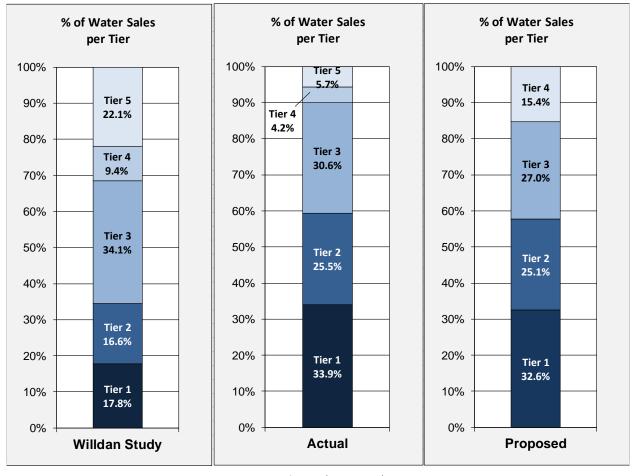
- **Tier 1: 0 6 hcf:** Indoor use for a typical 2.8 person single family residential household multiplied by 50-55 gallons per day (efficient water use allowance)
- **Tier 2: 6.1 12 hcf:** Indoor use for approximately 5.6 persons per larger household multiplied by 50-55 gallons per day (efficient water use allowance)
- Tier 3: 12.1 25 hcf: Slightly more than double the allotment of indoor Tiers 1 and 2 for efficient outdoor water consumption
- Tier 4: Over 25 hcf: Additional water use above Tier 3

According to industry literature, a typical home uses 30-70 percent of its water outside. This Tier 3 allowance provides 52 percent for outdoor watering before moving into Tier 4.

To simplify the billing process, BWA also recommends setting the tier breakpoints to one decimal point.

Table 22. Current and Proposed Single Family Residential Tiers

	WILLDAN STU	ΟY		ACTUAL - CURREN	T TIERS		PROPOSED T	IERS
	Monthly	Water Use		Monthly	Water Use		Monthly	Water Use
	Use	in Tier		Use	in Tier		Use	in Tier
Tier 1	0 - 6.26 hcf	17.8%	Tier 1	0 - 6.26 hcf	33.9%	Tier 1	0 - 6 hcf	32.6%
Tier 2	6.27 - 12.52 hcf	16.6%	Tier 2	6.27 - 12.52 hcf	25.5%	Tier 2	6.1 - 12 hcf	25.1%
Tier 3	12.53 - 31.03 hcf	34.1%	Tier 3	12.53 - 31.03 hcf	30.6%	Tier 3	12.1 - 25 hcf	27.0%
Tier 4	31.04 - 40.28 hcf	9.4%	Tier 4	31.04 - 40.28 hcf	4.2%	Tier 4	Over 25 hcf	15.4%
Tier 5	Over 40.28 hcf	22.1%	Tier 5	Over 40.28 hcf	5.7%			
Total		100.0%	Total		100.0%	Total		100.0%



 $¹⁻Water\ bills\ \&\ use\ statistics\ based\ on\ average\ consumption\ data\ for\ 2011/12\ and\ 2012/13.$

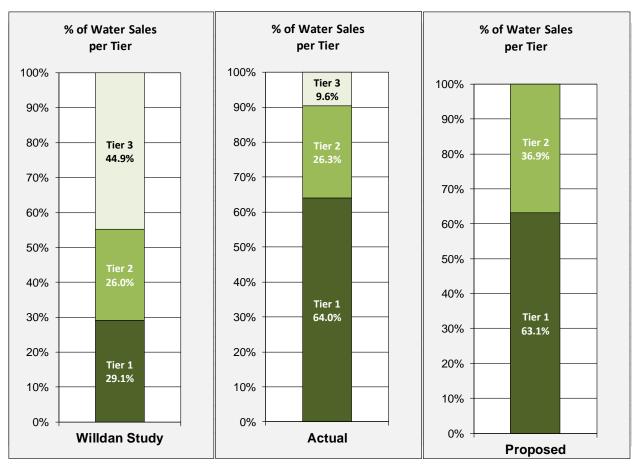
Revised Multi-Family Residential Variable Charge

The 2012 Study estimated that nearly 45 percent of multi-family residential water would be sold in Tier 3. However, in actuality, only 10% of water is sold in the top tier. Table 23 compares the amount of water sold in each multi-family tier for a) the 2012 Study, b) what the City is actually collecting and c) the recommended new tiers. Based on an updated analysis of water consumption, BWA recommends revising the multi-family tiers from the current 3 tiers to 2 tiers. The tier breakpoints are designed to provide a reasonable amount of water in Tier 1 for efficient indoor water use for multi-family residential households. The recommended multi-family tier breakpoints are:

- **Tier 1: 0 5 hcf:** Indoor use for 2.3 persons per multi-family household multiplied by 50-55 gallons per day (efficient water use allowance)
- Tier 2: Over 5 hcf: Additional water use above Tier 1

Table 23. Current and Proposed Multi-Family Residential Tiers

	WILLDAN STU	ΟY		ACTUAL - CURRENT	T TIERS		PROPOSED TI	ERS
	Monthly	Water Use		Monthly	Water Use		Monthly	Water Use
	Use	in Tier		Use	in Tier		Use	in Tier
Tier 1	0 - 5.10 hcf	29.1%	Tier 1	0 - 5.10 hcf	64.0%	Tier 1	0 - 5 hcf	63.1%
Tier 2	5.11 - 10.20 hcf	26.0%	Tier 2	5.11 - 10.20 hcf	26.3%	Tier 2	Over 5 hcf	36.9%
Tier 3	Over 10.20 hcf	44.9%	Tier 3	Over 10.20 hcf	9.6%			
Total		100.0%	Total		100.0%	Total		100.0%



^{1 -} Water bills & use statistics based on average consumption data for 2011/12 and 2012/13.

Commercial and Irrigation

For commercial and irrigation, BWA does not recommend any changes to the uniform tier structure. Uniform block rates for non-residential customers are common in the industry because it is difficult to design tiers that will accommodate a variety of uses. For example, a commercial customer who uses a lot of water does not necessarily mean that the customer is

using water inefficiently. Inclining tiered rates are more practical to implement for residential customers because the overall consumption patterns for this class is fairly homogenous.

Recycled Water

The City's current recycled water rates are based on a 25 percent discount from the potable rates. The system costs for recycled water are combined with potable water and therefore going forward, the fixed customer charges should be the same as potable water based on a detailed recycled water cost review. BWA recommends a 15 percent discount on the variable rates for commercial and irrigation. The discount provides incentive for customers to use recycled water which reduces overall system dependency on other potable water sources.

Private Fire Line

The 2012 Study did not include variable rates for private fire lines. BWA recommends that the variable rate for private fire lines be equivalent to the potable variable charge for commercial customers.

Variable Rate Calculations

The variable component is comprised of an average cost for blended Water Supply including both groundwater and purchased MWD water and the Peaking costs for each customer category. Peaking costs are allocated to each customer category based on their proportional average and peak demands. This allocation reflects the higher costs the water utility incurs to meet additional demand due to peaking.

In the 2012 Study, the tiered rate structure for residential customers was designed to reflect the higher cost of purchased water and the proportional costs of each tier based on each tier's peak demand when compared to the first tier. The BWA proposed rate structure combines the costs of groundwater production and MWD water purchases to derive a "blended rate" or an average water supply cost per hcf. The proposed rate structure more closely reflects how water supply and peak costs are incurred. The variable charge rate derivation is calculated on Table 24 and Table 25.

Variable charges for all customer categories are comprised of (1) the blended water supply cost (groundwater and MWD) and (2) the peaking costs for each class. The blended supply cost is simply the combined cost of producing groundwater and importing MWD water divided by the annual total water sales. As calculated in Table 25, the blended supply cost is the same for all customer categories and is \$2.19 per hcf for 2014/15 and increases to \$2.30 per hcf in 2015/16.

Residential Tiered Rate Development

Table 24 distributes the Base + Max costs to the residential tiers to calculate a proportional price differential factor for each tier breakpoint. For single family and multi-family residential customers, the Base + Max costs are apportioned to each tier using the "% of Average" and "% of Peak" allocations and peaking factors developed in Table 17. For single family residential, peaking is estimated to occur in Tiers 3 and 4 which have been designed for outdoor water use and therefore, additional costs are allocated to these higher tiers. Likewise, peaking for multifamily residential occurs in Tier 2. The peaking ratios for each tier are as follows:

	SFR Tier Peaking Factor	MFR Tier Peaking Factor
Tier 1	1.00	1.00
Tier 2	1.26	2.14
Tier 3	1.82	
Tier 4	2.31	

The Base + Max costs for each tier breakpoint are divided by the estimated level of consumption in each tier to derive a unit cost per tier. The unit cost per tier is then normalized to derive the differential factors for each tier as follows:

	SFR Tier Price Differential	MFR Tier Price Differential
Tier 1	1.00	1.00
Tier 2	5.40	5.94
Tier 3	8.55	
Tier 4	14.22	

These peaking price differentials are then used to develop the inclining tier rates as shown on Table 25.

Table 24. Residential Base + Max Tiered Cost Allocation

POTABLE WATER OPERATION & MAINTENANCE Potable Water Operation Operation Potable Water Facilities Operation Potable Water Power for Pumping Operation Potable Wtr Quality & Treat Plants Operation Potable Wtr Purchased for Resale Operation Potable Water Miscellaneous Security Activities General Fund Security Activities Operations Potable Water Miscellaneous	Total Expenses (6-Year Average) SFR MFR \$856,150 2,705,517 1,350,367 18,902,183 172,483 333 500,000	\$102,475 - 337,592	Peak Allocation (1) 45.03% 32.14%	Water Allocation (hcf) Tier's Allocation %	Tier 1 6 14%	Tier 2	Tier 3	Tier 4 19	Tier 1 5	Tier 2
Potable Water Operation Operation Potable Water Facilities Operation Potable Water Power for Pumping Operation Potable Water Power for Pumping Operation Potable Water Quality & Treat Plants Operation Potable Water Miscellaneous Security Activities General Fund Security Activities	\$856,150 2,705,517 1,350,367 18,902,183 172,483 333	\$102,475	45.03% 32.14%		6	6				
Potable Water Operation Operation Potable Water Facilities Operation Potable Water Power for Pumping Operation Potable Water Power for Pumping Operation Potable Water Quality & Treat Plants Operation Potable Water Miscellaneous Security Activities General Fund Security Activities	\$856,150 2,705,517 1,350,367 18,902,183 172,483 333	\$102,475	32.14%				13	19	5	-
Potable Water Operation Operation Potable Water Facilities Operation Potable Water Power for Pumping Operation Potable Water Power for Pumping Operation Potable Water Quality & Treat Plants Operation Potable WT Purchased for Resale Operation Potable Water Miscellaneous Security Activities General Fund Security Activities	\$856,150 2,705,517 1,350,367 18,902,183 172,483 333	\$102,475 -		Tier's Allocation %	14%					
Potable Water Operation Operation Potable Water Facilities Operation Potable Water Power for Pumping Operation Potable Water Power for Pumping Operation Potable Water Quality & Treat Plants Operation Potable Wat Purchased for Resale Operation Potable Water Miscellaneous Security Activities General Fund Security Activities	2,705,517 1,350,367 18,902,183 172,483 333	-	\$165,785			14%	30%	43%	50%	50%
Operation Potable Water Power for Pumping Operation Potable Wrt Pucker 1 Plants Operation Potable Wtr Purchsed for Resale Operation Potable Water Miscellaneous Security Activities General Fund Security Activities	2,705,517 1,350,367 18,902,183 172,483 333	-	\$165,785							
Operation Potable Wtr Quality & Treat Plants Operation Potable Wtr Purchased for Resale Operation Potable Water Miscellaneous Security Activities General Fund Security Activities	1,350,367 18,902,183 172,483 333	337,592			5,598	25,890	43,677	40,529	18,758	72,04
Operation Potable Wtr Purchased for Resale Operation Potable Water Miscellaneous Security Activities General Fund Security Activities	18,902,183 172,483 333	337,592	-							
Operation Potable Water Miscellaneous Security Activities General Fund Security Activities	172,483 333		337,592		18,440	59,761	104,198	104,830	61,794	170,310
Security Activities General Fund Security Activities	333	20,645	33,400		1,128	5,216	8,799	8,165	3,779	14,51
	500,000	42	69		2,120	11	18	17	8	31
Operations-Cr6 Demo Eac		63,667	103,000		3,478	16,085	27,136	25,180	11,654	44,76
	113,667	14,474	23,415		791	3,657	6,169	5,724	2,649	10,17
Chromium Removal Facilities	150,833	19,206	31,072		1,049	4,852	8,186	7,596	3,516	13,50
Potable Water Source Maintenance Maintenance of Potable Water Wells	53,050				-	-	-	-	-	-
Maintenance Potable Wtr Production & Pumping	257,667	64,417	64,417		3,519	11,403	19,882	20,003	11,791	32,49
Maintenance Potable Water Treat Plant	62,417	15,604	15,604		852	2,762	4,816	4,845	2,856	7,87
Potable Water Transmission & Distribution Mtc		-,	.,		-	-		-	-	-
Maintenance Potable Water Reservoir & Tanks	178,433	21,357	34,552		1,167	5,396	9,103	8,447	3,909	15,01
Maintenance Potable Water Mains	758,083	90,738	146,795		4,956	22,924	38,674	35,887	16,609	63,79
Maintenance Potable Water Hydrants	245,850	-	-		-	-	-	-	-	-
Maintenance Potable Water Sevices Maintenance Potable Water Meters	303,667 534,617	-	-				-		-	
Maintenance Potable Water Misc	1,218,567	145,854	235,963		7,967	36,849	62,166	57,685	26,698	102,546
Smart Grid Maintenance	7,200	917	1,483		50	232	391	363	168	645
Fiber Maintenance	125,450	15,974	25,843		873	4,036	6,808	6,318	2,924	11,231
0.000.00.00.00.00.00.00.00.00.00.00.00.										
RECYCLED WATER OPERATION & MAINTENANCE Recycled Water Operation										
Operation Recycled Water Facilities	197,867	25,195	40,761		1,376	6,365	10,739	9,965	4,612	17,714
Operation Recycled Wtr Power for Pumping	320,317	40,787	65,985		2,228	10,304	17,384	16,131	7,466	28,676
Operation Recycled Water Miscellaneous	39,083	4,977	8,051		272	1,257	2,121	1,968	911	3,499
Recycled Water Source Maintenance					-	-	-	-	-	-
Maintenance Recycled Wtr Prod & Pumping	232,383	29,590	47,871		1,616	7,476	12,612	11,703	5,416	20,804
Potable Water Transmission & Distribution Mtc Maintenance Recycled Water Res/Tanks	9,933	1,265	2,046		69	320	539	500	232	889
Maintenance Recycled Water Mains	11,767	1,498	2,424		82	379	639	593	274	1,053
Maintenance Recycled Water Hydrants	717		-		-	-	-	-	-	
Maintenance Recycled Water Sevices	4,250	-	-		-	-	-	-	-	-
Maintenance Recycled Water Meters	26,317	-	-		-	-	-	-	-	-
Maintenance Potable Water Misc						-			-	
Maintenance Recycled Water Misc Other Water Operating Expenses	29,617	3,771	6,101		206	953	1,607	1,492	690	2,651
Water Services Engineering	1,542,750	_	_		-	-	-	-		-
AMI Support	571,550	-	-							-
Small Tools Expense	72,317	-	-		-	-	-	-	-	-
Other Water Services Operating Expenses	6,775,217	967,888	967,888		52,869	171,338	298,740	300,551	177,167	488,285
WATER SERVICES NON-OPERATING EXPENSES										
Transfers to Other Funds	-		-			-		-		-
Water System Plant Depreciation	5,853,217	700,591	1,133,417		38,269	176,998	298,605	277,084	128,240	492,565
Gwp Depreciation of Genl Fac (Wtr 32%)	331,467	39,674	64,185		2,167	10,023	16,910	15,691	7,262	27,894
Principal - 2008 Bonds	1,309,167	156,699	253,507		8,559	39,589	66,788	61,974	28,683	110,170
Interest - 2008 Bonds Principal - 2012 Bonds	2,140,483	256,202 16,957	414,483 27,432		13,995 926	64,727 4,284	109,198 7,227	101,328 6,706	46,896 3,104	180,128 11,922
Interest - 2012 Bonds	141,667 1,193,533	142,858	231,116		7,803	36,092	60,889	56,500	26,149	100,439
Bond Sale Expense - 2008 Bonds	43,067	5,155	8,339		282	1,302	2,197	2,039	944	3,624
Bond Sale Expense - 2012 Bonds	-	-	-		-	-	-	-	-	-
Gladys Drive Reimbursement	166,667	19,949	32,273		1,090	5,040	8,503	7,890	3,652	14,025
Miscellaneous Non-operating Expense		-	-		-	-	-	-	-	-
WATER FUND ALLOCATIONS/EXPENSES									-	
General Plant Allocation	182,250	45,563	45,563		2,489	8,066	14,063	14,148	8,340	22,986
Customer Service Expense	2,890,233		-		-	-	-	-	-	-
CAPITAL PROJECTS					_	_	_		_	
Bond Funded and PayGo Projects	6,885,709	824,173	1,333,349		45,019	208,221	351,279	325,961	150,861	579,45
TOTAL		\$4,195,753	\$5,903,781		\$229,185	\$951,807	\$1,620,063	\$1,537,814	\$768,012	\$2,665,723
TOTAL	\$35,400,070	34,155,755	\$3,503,761	% Allocation	2.3%	9.4%	16.0%	15.2%	7.6%	26.49
				/o Allocation	2.370	3.4/0	10.0%	13.2%	7.0%	20.47
				Base Consumption (hcf)	1,568,261	1,206,291	1,297,325	739,798	2,774,826	1,622,68
				Peaking (2)	1.00	1.26	1.82	2.31	1.00	2.1
				Peak Consumption (hcf)	1,568,261	1,518,657	2,361,131	1,706,623	2,774,826	3,469,63
				Cost Allocated	\$229,185	\$951,807	1,620,063	\$1,537,814	768,012	\$2,665,72
				% of Base & Max Costs	5%	22%	37%	35%	22%	78
				Rate per Unit	\$0.15	\$0.79	\$1.25	\$2.08	\$0.28	\$1.6
				Percent Normalized	0.03 1.00	0.19 5.40	0.29 8.55	0.49 14.22	0.14 1.00	0.8 5.9

Table 17 - Average (Base) and Peak (Max) Ratios by Customer Class
 Peaking factors have been extrapolated based on estimated use in each tier.

As shown in Table 25, the proposed variable charges are derived by combining the Base + Max (Peaking) costs for each customer category with the blended water supply cost for each tier. The variable charges represent the proportional share of Base + Max and Water Supply costs for each customer category.

Table 25. Base Scenario: Variable Charge Calculation

				Five-Year Plan		
		2014/15	2015/16	2016/17	2017/18	2018/1
BLENDED WA	TER SUPPLY UNIT COSTS					
Ground Wate		\$6,488,872	\$6,775,605	\$7,081,789	\$7,401,866	\$7,736,366
Total Ground	Water Consumption (HCF)	3,932,052	3,932,052	3,932,052	3,932,052	3,932,161
Ground Wat	ter Variable per Unit Cost	\$1.65	\$1.72	\$1.80	\$1.88	\$1.97
MWD Water (Costs	\$19,546,183	\$20,409,898	\$21,332,203	\$22,296,360	\$23,303,961
	Vater Consumption (HCF)	8,031,409	7,983,276	7,987,908	7,992,637	7,997,352
	able per Unit Cost	\$2.43	\$2.56	\$2.67	\$2.79	\$2.91
IVIVID - Valle	able per offic cost	Ş2.43	\$2.50	32.07	32.73	\$2.51
Total Ground	Water + MWD Costs	\$26,035,055	\$27,185,503	\$28,413,993	\$29,698,226	\$31,040,327
Total Ground	Water + MWD Consumption (HCF)	11,963,461	11,915,328	11,919,960	11,924,689	11,929,513
Blended Rat	e (Ground Water + MWD Water)	\$2.18	\$2.28	\$2.38	\$2.49	\$2.60
Cumulative U	se Reduction Adjustment	0.4%	0.8%	0.8%	0.7%	0.79
Blended Rate	(Adjusted for Conservation)	\$2.19	\$2.30	\$2.40	\$2.51	\$2.62
	SINGL	E FAMILY RESIDENTIA	AL VARIABLE RA	TE		
Base & Max C	Costs Allocated to Single Family Residential	\$3,578,024	\$3,736,131	\$3,904,963	\$4,081,457	\$4,265,903
_	amily Consumption (HCF)	4,787,216	4,763,016	4,762,951	4,762,920	4,762,922
Peaking Vari	iable per Unit Cost	\$0.75	\$0.78	\$0.82	\$0.86	\$0.90
DD015	COLOURADTION DED DI CONTINUE					
PROJECTED C	ONSUMPTION PER BLOCK (HCF)					
Tier 1	Monthly Tier 0 - 6 hcf	1 560 020	1 571 200	1 576 113	1,580,841	1 505 504
Tier 1 Tier 2	0 - 6 hct 6.1 - 12 hcf	1,569,829	1,571,399 1,199,064	1,576,113		1,585,584
		1,202,672		1,200,263	1,201,463	1,202,664
Tier 3 Tier 4	12.1 - 25 hcf Over 25 hcf	1,283,054	1,268,940	1,265,133	1,261,338	1,257,554
Total	Over 25 nct	731,661	723,613	721,442	719,278	717,120
TOTAL		4,787,216	4,763,016	4,762,951	4,762,920	4,762,922
BASE + MAX	VARIABLE PER HCF					
	Peaking Tier Price Differential					
Peaking 1	1.00	\$0.12	\$0.13	\$0.13	\$0.14	\$0.15
Peaking 2	5.40	\$0.65	\$0.70	\$0.70	\$0.76	\$0.13
Peaking 3	8.55	\$1.03	\$1.11	\$1.11	\$1.20	\$1.28
Peaking 4	14.22	\$1.71	\$1.85	\$1.85	\$1.99	\$2.13
				7	7	*
	LY VARIABLE RATE PER HCF					
Tier 1	Peaking 1 + Blended Rate	\$2.31	\$2.43	\$2.53	\$2.65	\$2.77
Tier 2	Peaking 2 + Blended Rate	\$2.84	\$3.00	\$3.10	\$3.27	\$3.43
Tier 3	Peaking 3 + Blended Rate	\$3.22	\$3.41	\$3.51	\$3.71	\$3.90
Tier 4	Peaking 4 + Blended Rate	\$3.90	\$4.15	\$4.25	\$4.50	\$4.75
		MULTI-FAMILY VAR	ABLE RATE			
Base & Max C	Costs Allocated to Multi-Family	\$2,831,609	\$2,956,733	\$3,090,345	\$3,230,020	\$3,375,989
Total Multi-Fa	amily Consumption (HCF)	4,388,922	4,380,421	4,387,162	4,393,930	4,400,724
Peaking Vari	iable per Unit Cost	\$0.65	\$0.67	\$0.70	\$0.74	\$0.77
PROJECTED C	CONSUMPTION PER BLOCK (HCF)					
	Monthly Tier					
Tier 1	0 - 5 hcf	2,777,601	2,780,379	2,788,720	2,797,086	2,805,477
Tier 2	Over 5 hcf	1,611,321 4,388,033	1,600,042	1,598,442	1,596,844	1,595,247
Total		4,388,922	4,380,421	4,387,162	4,393,930	4,400,724
BASE + MAX I	DAY VARIABLE PER HCF					
	B					
	Peaking Tier Price Differential				44.44	
Peaking 1	1.00	\$0.23	\$0.24	\$0.25	\$0.26	\$0.27
Peaking 2	5.94	\$1.37	\$1.43	\$1.49	\$1.54	\$1.60
MULTI-FAMII	LY VARIABLE RATE PER HCF					
Tier 1	Peaking 1 + Blended Rate	\$2.42	\$2.54	\$2.65	\$2.77	\$2.89
Tier 2	Peaking 2 + Blended Rate	\$3.56	\$3.73	\$3.89	\$4.05	\$4.22
		CONANAEDCIALLACT	ADI E DATE			
Paco & Mary C	Costs Allocated to Commercial	\$1,505,119	\$1,571,628	\$1,642,648	\$1,716,891	\$1,794,480
	rcial Consumption (HCF) iable per Unit Cost	<u>2,243,447</u> \$0.67	<u>2,236,717</u> \$0.70	<u>2,238,954</u> \$0.73	<u>2,241,193</u> \$0.77	<u>2,243,434</u> \$0.80
i caking vdfl		ŞU.07		ŞU.75	ŞU. / /	JU.8U
Commercial \	Variable Rate per HCF (Peaking + Blended Rate)	\$2.86	\$3.00	\$3.13	\$3.28	\$3.42
		IRRIGATION VARIA	BLF RATE			
Base & May C	Costs Allocated to Irrigation	\$413,770	\$432,053	\$451,577	\$471,988	\$493,317
Dase of Inlay C		5413,770 <u>543,876</u>	\$432,053 <u>535,174</u>	5451,577 530,893	5471,988 526,646	5493,317 522,433
Total Irrigation	ni consumption (nci j	<u> 343,670</u>				
Total Irrigatio Peaking Vari		\$0.76	\$0.81	50.85	50.90	50.94
	iable per Unit Cost	\$0.76	\$0.81	\$0.85	\$0.90	\$0.94
Peaking Vari		\$0.76 \$2.95	\$0.81 \$3.11	\$0.85 \$3.25	\$0.90 \$3.41	\$0.94

Water Adjustment Charges

The WAC is currently set at zero as all projected water system costs are included in the rate calculation. Pursuant to Government Code Section 53756, the City will review the WAC semi-annually to recover costs outside the control of GWP as a pass-through charge. These expenditures include increased costs for purchasing MWD water and increased energy costs for water production.

Currently, the WAC is only applied to Tiers 3 through 5 for single family residential, and Tiers 2 and 3 for multi-family residential customers. The WAC is applied to all commercial and irrigation consumption, including recycled water customers. Beginning in 2014/15, the WAC will be applied to all water consumed for customer categories.

SECTION 6: PROPOSED RATES & IMPACTS

Base Scenario: Proposed Water Rates

The following tables shows a 5-year schedule of proposed water rates for the Base Scenario incorporating a) the overall level of required rate increases to fund GWP's costs of providing service, b) the proposed rate structure adjustments, and c) the revenue recovery allocations that fairly apportion costs to all customers. The first rate adjustment will be effective September 1, 2014. Rate increases thereafter will be effective on July 1 of each year.

Table 26. Base Scenario: Proposed Potable Water Rates

MON	THLY WATE	R CUSTOME	R CHARGES					
	Current	Projected						
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
5/8"	\$21.18	\$20.80	\$21.61	\$22.47	\$23.37	\$24.30		
3/4"	\$24.83	\$26.39	\$27.42	\$28.51	\$29.65	\$30.84		
1.0"	\$32.15	\$34.78	\$36.13	\$37.57	\$39.08	\$40.63		
1.5"	\$50.43	\$57.15	\$59.36	\$61.73	\$64.21	\$66.76		
2.0"	\$72.38	\$68.33	\$70.98	\$73.81	\$76.78	\$79.83		
3.0"	\$123.58	\$236.09	\$245.22	\$255.01	\$265.30	\$275.79		
4.0"	\$196.72	\$459.77	\$477.54	\$496.61	\$516.66	\$537.07		
6.0"	\$379.59	\$851.21	\$884.10	\$919.41	\$956.54	\$994.31		
8.0"	\$599.02	\$1,969.61	\$2,045.70	\$2,127.41	\$2,213.34	\$2,300.71		
10.0"	\$855.03	\$3,088.01	\$3,207.30	\$3,335.41	\$3,470.14	\$3,607.11		
12.0"	-	\$3,088.01	\$3,207.30	\$3,335.41	\$3,470.14	\$3,607.11		

DAILY WATER CO	JSTOMER CH	ARGES (MONT	HLY CHARGE	(30 DAYS)		
	Current			Projected		
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$0.71	\$0.69	\$0.72	\$0.75	\$0.78	\$0.81
3/4"	\$0.83	\$0.88	\$0.91	\$0.95	\$0.99	\$1.03
1.0"	\$1.07	\$1.16	\$1.20	\$1.25	\$1.30	\$1.35
1.5"	\$1.68	\$1.91	\$1.98	\$2.06	\$2.14	\$2.23
2.0"	\$2.41	\$2.28	\$2.37	\$2.46	\$2.56	\$2.66
3.0"	\$4.12	\$7.87	\$8.17	\$8.50	\$8.84	\$9.19
4.0"	\$6.56	\$15.33	\$15.92	\$16.55	\$17.22	\$17.90
6.0"	\$12.65	\$28.37	\$29.47	\$30.65	\$31.88	\$33.14
8.0"	\$19.97	\$65.65	\$68.19	\$70.91	\$73.78	\$76.69
10.0"	\$28.50	\$102.93	\$106.91	\$111.18	\$115.67	\$120.24
12.0"	-	\$102.93	\$106.91	\$111.18	\$115.67	\$120.24

	MONTHLY VA	RIABLE CHAR	GES - DOES N	OT INCLUD	E WATER A	DJUSTMEN	T CHARGES					
	SINGLE FAMILY RESIDENTIAL											
	Current	Proposed	Current			Projected						
	Monthly Tiers	Monthly Tiers	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19				
Tier 1	0 - 6.26 hcf	0 - 6 hcf	\$1.72	\$2.31	\$2.43	\$2.53	\$2.65	\$2.77				
Tier 2	6.27 - 12.52 hcf	6.1 - 12 hcf	\$2.18	\$2.84	\$3.00	\$3.10	\$3.27	\$3.43				
Tier 3	12.53 - 31.03 hcf	12.1 - 25 hcf	\$3.18	\$3.22	\$3.41	\$3.51	\$3.71	\$3.90				
Tier 4	31.04 - 40.28 hcf	Over 25 hcf	\$3.54	\$3.90	\$4.15	\$4.25	\$4.50	\$4.75				
Tier 5	Over 40.28 hcf		\$4.13	-	-	-	-	-				

	MULTI- FAMILY RESIDENTIAL										
	Current	Proposed	Current (1)	Projected							
	Monthly Tiers	Monthly Tiers	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19			
Tier 1	0 - 5.10 hcf	0 - 5 hcf	\$1.81	\$2.42	\$2.54	\$2.65	\$2.77	\$2.89			
Tier 2	5.11 - 10.20 hcf	Over 5 hcf	\$3.03	\$3.56	\$3.73	\$3.89	\$4.05	\$4.22			
Tier 3	Over 10.20 hcf		\$3.60	-	-	-	-	-			

COMMERCIAL									
	Current	t Projected							
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19			
All Consumption per hcf	\$2.87	\$2.86	\$3.00	\$3.13	\$3.28	\$3.42			

IRRIGATION										
	Current			Projected						
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19				
All Consumption per hcf	\$3.08	\$2.95	\$3.11	\$3.25	\$3.41	\$3.56				

 $^{1 -} The \ tier \ breakpoints \ for \ multi-family \ customers \ are \ prorated \ based \ on \ the \ number \ of \ dwelling \ units \ for \ each \ account.$

Table 27. Base Scenario: Proposed Recycled Water Rates

	MONTHLY RECY	CLED WATER	CUSTOMER (CHARGE							
	Current	Projected									
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19					
5/8"	\$15.89	\$17.68	\$18.37	\$19.10	\$19.86	\$20.66					
3/4"	\$18.62	\$22.43	\$23.31	\$24.23	\$25.20	\$26.21					
1.0"	\$24.11	\$29.56	\$30.71	\$31.93	\$33.22	\$34.54					
1.5"	\$37.82	\$48.58	\$50.46	\$52.47	\$54.58	\$56.75					
2.0"	\$54.29	\$58.08	\$60.33	\$62.74	\$65.26	\$67.86					
3.0"	\$92.69	\$200.68	\$208.44	\$216.76	\$225.51	\$234.42					
4.0"	\$147.54	\$390.80	\$405.91	\$422.12	\$439.16	\$456.51					
6.0"	\$284.69	\$723.53	\$751.49	\$781.50	\$813.06	\$845.16					
8.0"	\$449.27	\$1,674.17	\$1,738.85	\$1,808.30	\$1,881.34	\$1,955.60					
10.0"	\$641.27	\$2,624.81	\$2,726.21	\$2,835.10	\$2,949.62	\$3,066.04					
12.0"	-	\$2,624.81	\$2,726.21	\$2,835.10	\$2,949.62	\$3,066.04					

DAILY REC	YCLED WATER CU	STOMER CHARG	E (MONTHLY C	HARGE/30 DA	YS)	
	Current			Projected		
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$0.53	\$0.59	\$0.61	\$0.64	\$0.66	\$0.69
3/4"	\$0.62	\$0.75	\$0.78	\$0.81	\$0.84	\$0.87
1.0"	\$0.80	\$0.99	\$1.02	\$1.06	\$1.11	\$1.15
1.5"	\$1.26	\$1.62	\$1.68	\$1.75	\$1.82	\$1.89
2.0"	\$1.81	\$1.94	\$2.01	\$2.09	\$2.18	\$2.26
3.0"	\$3.09	\$6.69	\$6.95	\$7.23	\$7.52	\$7.81
4.0"	\$4.92	\$13.03	\$13.53	\$14.07	\$14.64	\$15.22
6.0"	\$9.49	\$24.12	\$25.05	\$26.05	\$27.10	\$28.17
8.0"	\$14.98	\$55.81	\$57.96	\$60.28	\$62.71	\$65.19
10.0"	\$21.38	\$87.49	\$90.87	\$94.50	\$98.32	\$102.20
12.0"	-	\$87.49	\$90.87	\$94.50	\$98.32	\$102.20

M	MONTHLY RECYCLED WATER VARIABLE CHARGES											
COMMERCIAL RECYCLED WATER RATE												
	Current Projected											
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19						
Water Variable Charge	\$2.1500 \$2.43 \$2.55 \$2.66 \$2.79 \$2.91											

IRRIGATION RECYCLED WATER RATE										
	Current			Projected						
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19				
Water Variable Charge	\$2.3100	\$2.51	\$2.64	\$2.76	\$2.90	\$3.03				

 $¹⁻Beginning\ in\ 2014/15, the\ recycled\ water\ customer\ charge\ and\ variable\ rate\ will\ be\ based\ on\ a\ 15\%\ discount\ from\ the\ potable\ rates.$

Table 28. Base Scenario: Proposed Private Fire Line Rates (1)

	М	ONTHLY PRIVATE FIRE LINI	CUSTOMER	CHARGE								
	Current		Projected									
Fire Line Service Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19						
1" (2)	-	\$8.10	\$8.42	\$8.75	\$9.10	\$9.47						
1-1/2" (2)	-	\$8.96	\$9.31	\$9.68	\$10.07	\$10.48						
2.0"	\$13.4725	\$10.44	\$10.86	\$11.29	\$11.75	\$12.22						
3.0"	\$28.1415	\$15.74	\$16.40	\$17.07	\$17.76	\$18.47						
4.0"	\$202.37	\$24.89	\$25.96	\$27.04	\$28.13	\$29.25						
6.0"	\$395.98	\$57.74	\$60.27	\$62.80	\$65.36	\$67.93						
8.0"	\$633.96	\$114.39	\$119.44	\$124.49	\$129.57	\$134.66						
10.0"	\$917.86	\$199.61	\$208.44	\$217.28	\$226.15	\$235.03						
12.0" (2)	-	\$317.72	\$331.80	\$345.89	\$360.00	\$374.13						

D	AILY PRIVATE	FIRE LINE WATER CUSTOMER C	CHARGE (MON	THLY CHARGE/	'30 DAYS)	
	Current			Projected		
Fire Line Service Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
1" (2)	-	\$0.27	\$0.28	\$0.29	\$0.30	\$0.32
1-1/2" (2)	-	\$0.30	\$0.31	\$0.32	\$0.34	\$0.35
2.0"	\$0.45	\$0.35	\$0.36	\$0.38	\$0.39	\$0.41
3.0"	\$0.94	\$0.52	\$0.55	\$0.57	\$0.59	\$0.62
4.0"	\$6.75	\$0.83	\$0.87	\$0.90	\$0.94	\$0.98
6.0"	\$13.20	\$1.92	\$2.01	\$2.09	\$2.18	\$2.26
8.0"	\$21.13	\$3.81	\$3.98	\$4.15	\$4.32	\$4.49
10.0"	\$30.60	\$6.65	\$6.95	\$7.24	\$7.54	\$7.83
12.0" (2)	-	\$10.59	\$11.06	\$11.53	\$12.00	\$12.47

	MONTHLY PRIVATE FIRE VARIABLE CHARGES											
	Current	Proposed		Pi	rojected (3)							
Current Tiers	Jan 1, 2014	Tiers (3)	2014/15	2015/16	2016/17	2017/18	2018/19					
0 - 10 hcf	\$0.9204	All Use	\$2.86	\$3.00	\$3.13	\$3.28	\$3.42					
Over 10 hcf	\$2.0709											

^{1 -} Private fire line rates for 4" service and larger were suspended in January 2014.

Base Scenario: Water Bill Impacts

The following tables show sample bill impacts for a selection of customer profiles.

The proposed revenue adjustments do not imply that each customer will receive the same percentage increase in their bill. The bill impacts will vary for each customer as a result of the proposed fixed meter charge adjustments, the proposed variable rate structure changes, and each individual customer's actual consumption levels. Note that water consumption, particularly for single family customers, typically varies from month to month due to seasonal variations in weather and/or other factors. Hence customers could face a range of impacts throughout the year depending on their level of water use in each billing period.

^{2 -} Currently has no rate

^{3 -} Beginning in 2014/15, the variable charge for private fire lines will be equal to the potable commercial rate.

The sample bill impacts do not include any future WAC increases. The WAC is calculated twice a year and recovers any additional costs of water purchases and energy costs that exceed the annual budget. The WAC can either increase or decrease semi-annually and is based on the cost of purchased water from MWD and the cost of purchased energy for the previous 6 months.

Table 29. Base Scenario: Sample Single Family Bill Impacts*

				Current			Projected		
	Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
			SINGLE FAMI	LY RESIDENTIA	L				
ГН									
Use	\$15.66	\$21.97	\$23.01	\$24.83	\$26.39	\$27.42	\$28.51	\$29.65	\$30.84
10									
	\$8.40	\$9.53	\$9.97	\$10.78	\$13.86	\$14.58	\$15.18	\$15.90	\$16.62
	-	\$7.05	\$7.46	\$8.13	\$11.36	\$12.00	\$12.40	\$13.08	\$13.72
	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	
	=	Ξ.	Ξ.	=	Ξ.	Ξ	Ξ	Ξ.	
	\$8.40	\$16.58	\$17.43	\$18.92	\$25.22	\$26.58	\$27.58	\$28.98	\$30.34
<u>10</u>	\$12.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$36.41	\$38.55	\$40.44	\$43.75	\$51.61	\$54.00	\$56.09	\$58.63	\$61.18
		\$2.14	\$1.89	\$3.31	\$7.86	\$2.39	\$2.09	\$2.54	\$2.55
		6%	5%	8%	18%	5%	4%	5%	4%
гн									
Use	\$15.66	\$21.97	\$23.01	\$24.83	\$26.39	\$27.42	\$28.51	\$29.65	\$30.84
19									
	\$8.40	\$9.53	\$9.97	\$10.78	\$13.86	\$14.58	\$15.18	\$15.90	\$16.62
	\$16.26	\$11.85	\$12.54	\$13.67	\$17.04	\$18.00	\$18.60	\$19.62	\$20.58
	-	\$19.54	\$19.93	\$20.57	\$22.54	\$23.87	\$24.57	\$25.97	\$27.30
	-	-	-	-	-	-	-	-	
	=	Ξ	=	티	=	=	=	=	
	\$24.66	\$40.92	\$42.44	\$45.03	\$53.44	\$56.45	\$58.35	\$61.49	\$64.50
<u>19</u>	\$23.46	\$0.71	\$1.36	\$2.26	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$63.78	\$63.60	\$66.81	\$72.12	\$79.83	\$83.87	\$86.86	\$91.14	\$95.34
		(\$0.17)	\$3.20	\$5.32	\$7.71	\$4.04	\$2.99	\$4.28	\$4.20
		0%	5%	8%	11%	5%	4%	5%	5%
Use	\$15.66	\$21.97	\$23.01	\$24.83	\$26.39	\$27.42	\$28.51	\$29.65	\$30.84
50									
		•	-			•	•	-	\$16.62
									\$20.58
	-								\$50.70
	-				\$97.50	\$103.75	\$106.25	\$112.50	\$118.75
	, =				_ =	_ =	_ =	_ =	
		•			•	•		•	\$206.65
<u>50</u>		\$4.31	\$8.44				\$0.00		\$0.00
	\$158.05	\$171.93	\$180.87	\$194.87	\$196.65	\$208.08	\$214.17	\$225.90	\$237.49
		\$13.89	\$8.93	\$14.00	\$1.78	\$11.43	\$6.09	\$11.73	\$11.59
		9%	5%	8%	1%	6%	3%	5%	5%
	10 TH Use 19	TH Use 10 \$8.40 \$8.40 \$15.66 \$8.40 \$12.35 \$36.41 TH Use 19 \$8.40 \$16.26 \$24.66 \$23.46 \$63.78 TH Use 50 \$8.40 \$15.66 \$23.46 \$63.78	TH Use 10 \$8.40 \$9.53 - \$7.05 - \$7.05 - \$7.05 - \$15.66 \$8.40 \$16.58 10 \$12.35 \$0.00 \$36.41 \$38.55 \$2.14 6% TH Use 19 \$8.40 \$9.53 \$16.26 \$11.85 - \$19.54 - \$19.54 - \$24.66 \$40.92 19 \$23.46 \$0.71 \$63.78 \$63.60 (\$0.17) 0% TH Use 50 \$8.40 \$9.53 \$16.26 \$11.85 - \$19.54 - \$19.	TH Use 10 \$8.40 \$9.53 \$9.97 - \$7.05 \$7.46 - \$8.40 \$16.58 \$17.43 10 \$12.35 \$0.00 \$36.41 \$38.55 \$40.44 \$52.14 \$1.89 6% 5% TH Use 19 \$8.40 \$9.53 \$9.97 \$16.26 \$11.85 \$12.54 - \$19.54 \$19.93 - \$24.66 \$40.92 \$42.44 19 \$23.46 \$63.78 \$63.60 \$66.81 \$63.78 \$63.60 \$66.81 \$63.78 \$15.66 \$21.97 \$23.01 \$24.66 \$40.92 \$42.44 \$563.78 \$63.60 \$66.81 \$63.78 \$63.60 \$66.81 \$63.78 \$63.60 \$56.81 \$63.78 \$563.78 \$563.60 \$563.78 \$563.78 \$563.60 \$566.81 \$572.25 \$11.85 \$12.54 - \$59.97 \$772.25 \$11.85 \$12.54 - \$59.97 \$772.25 \$11.85 \$12.54 - \$59.97 \$772.25 \$11.85 \$12.54 - \$59.97 \$772.25 \$11.85 \$12.54 - \$59.97 \$772.25 \$11.85 \$12.54 - \$59.90 \$11.85 \$12.54 - \$59.90 \$11.85 \$12.54 - \$59.90 \$11.85 \$12.54 - \$59.90 \$11.85 \$12.54 - \$59.90 \$11.85 \$12.54 - \$59.90 \$11.85 \$12.54 - \$59.90 \$11.85 \$12.54 - \$59.90 \$11.85 \$12.54 - \$59.90 \$11.85 \$12.54 - \$59.90 \$11.85 \$12.54 - \$59.90 \$11.85 \$12.54 - \$59.90 \$13.54 - \$59.90 \$15.60 \$17.90 \$19.90 \$10.90 \$10.90 \$10.90 \$10.90 \$10.90 \$10.90 \$10.	TH USE 10 \$15.66 \$21.97 \$23.01 \$24.83 10 \$8.40 \$9.53 \$9.97 \$10.78 - \$7.05 \$7.46 \$8.13 - \$7.05 \$7.46 \$8.13 - \$1.25 \$8.40 \$16.58 \$17.43 \$18.92 \$18.92 \$18.92 \$12.35 \$0.00 \$36.41 \$38.55 \$40.44 \$43.75 \$21.4 \$1.89 \$3.31 \$6% \$5% 8% TH USE 19 \$8.40 \$9.53 \$9.97 \$10.78 \$16.26 \$11.85 \$12.54 \$13.67 - \$19.54 \$19.93 \$20.57 - \$19.54 \$19.93 \$20.57 - \$19.54 \$19.93 \$20.57 - \$19.54 \$19.93 \$20.57 - \$19.54 \$19.93 \$20.57 - \$19.54 \$19.93 \$20.57 - \$19.54 \$19.93 \$20.57 - \$19.54 \$19.93 \$20.57 - \$19.54 \$19.93 \$20.57 - \$10.78 \$16.26 \$11.85 \$12.54 \$43.07 \$24.83 19 \$23.46 \$40.92 \$42.44 \$45.03 \$45.03 \$45.03 \$5% \$8% TH Use \$63.78 \$63.60 \$66.81 \$72.12 (\$0.17) \$3.20 \$5.32 0% \$5% 8% TH Use \$50 \$8.40 \$9.53 \$9.97 \$10.78 \$71.25 \$11.85 \$12.54 \$13.67 - \$55.90 \$57.01 \$8.86 - \$30.99 \$31.54 \$32.75 - \$37.38 \$83.35 \$40.10 \$80.65 \$145.65 \$149.42 \$156.16 \$61.74 \$4.31 \$8.44 \$13.88 \$158.05 \$11.89 \$8.89 \$8.93 \$14.00	TH Use 10 \$15.66 \$21.97 \$23.01 \$24.83 \$26.39 \$10.78 \$13.86 \$57.05 \$7.46 \$8.13 \$11.36 \$25.22 \$25.22 \$25.22 \$25.22 \$25.22 \$25.22 \$25.24 \$21.4 \$21.89 \$33.11 \$24.83 \$26.39 \$30.00 \$30.00 \$30.00 \$30.00 \$30.41 \$38.55 \$40.44 \$43.75 \$51.61 \$2.14 \$21.48 \$38.85 \$40.44 \$43.75 \$51.61 \$2.14 \$51.89 \$3.31 \$7.86 6% \$5% 8% \$18% TH Use 19 \$8.40 \$9.53 \$9.97 \$10.78 \$13.86 \$16.26 \$11.85 \$12.54 \$13.67 \$17.04 \$45.03 \$53.44 \$19 \$24.84 \$25.34 \$26.39 \$19 \$10 \$10 \$10 \$10 \$10 \$10 \$1	TH USE 10 \$15.66 \$21.97 \$23.01 \$24.83 \$26.39 \$27.42 \$10 \$8.40 \$9.53 \$9.97 \$10.78 \$13.86 \$11.36 \$12.00 \$8.40 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$	TH USE 10 \$15.66 \$21.97 \$23.01 \$24.83 \$26.39 \$27.42 \$28.51 10 \$8.40 \$9.53 \$9.97 \$10.78 \$13.86 \$14.58 \$15.18 \$12.00 \$12.40 \$	TH Use 10

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 30. Base Scenarios: Sample Multi-Family Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				MULTI-FAMII	Y RESIDENTIA	۱L				
1" METER, 5 UNITS, 50 CCF	MONTH									
Fixed Charge	Use	\$15.66	\$28.46	\$29.79	\$32.15	\$34.78	\$36.13	\$37.57	\$39.08	\$40.63
Variable Charge	50									
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$60.50	\$63.50	\$66.25	\$69.25	\$72.25
Tier 2		\$72.25	\$71.39	\$72.37	\$74.08	\$89.00	\$93.25	\$97.25	\$101.25	\$105.50
Tier 3		-	=	=	4.00.00	=	=	=	=	± = ==
Subtotal Variable Charge		\$80.65	\$112.53	\$115.55	\$120.33	\$149.50	\$156.75	\$163.50	\$170.50	\$177.75
WAC Charge*	50	\$61.74	\$2.94	\$5.88	\$9.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$158.05	\$143.93	\$151.22	\$162.03	\$184.28	\$192.88	\$201.07	\$209.58	\$218.38
\$ Change			(\$14.12)	\$7.29	\$10.81	\$22.25	\$8.60	\$8.19	\$8.51	\$8.80
Percent Change			-9%	5%	7%	14%	5%	4%	4%	4%
1" METER, 5 UNITS, 70 CCF	-/MONTH									
Fixed Charge	Use	\$15.66	\$28.46	\$29.79	\$32.15	\$34.78	\$36.13	\$37.57	\$39.08	\$40.63
Variable Charge	70									
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$60.50	\$63.50	\$66.25	\$69.25	\$72.25
Tier 2		\$108.38	\$74.61	\$75.63	\$77.42	\$160.20	\$167.85	\$175.05	\$182.25	\$189.90
Tier 3		Ξ.	\$64.81	\$66.14	\$68.22	Ξ.	Ξ.	Ξ.	Ξ.	=
Subtotal Variable Charge		\$116.78	\$180.55	\$184.94	\$191.88	\$220.70	\$231.35	\$241.30	\$251.50	\$262.15
WAC Charge*	70	\$86.44	\$5.33	\$10.67	\$17.34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$218.87	\$214.34	\$225.40	\$241.37	\$255.48	\$267.48	\$278.87	\$290.58	\$302.78
\$ Change			(\$4.53)	\$11.06	\$15.97	\$14.11	\$12.00	\$11.39	\$11.71	\$12.20
Percent Change			-2%	5%	7%	6%	5%	4%	4%	4%
1" METER, 5 UNITS, 100 CO	E/MONT									
Fixed Charge	Use	\$15.66	\$28.46	\$29.79	\$32.15	\$34.78	\$36.13	\$37.57	\$39.08	\$40.63
Variable Charge	100	Ψ15.00	Q20110	Ų23.73	Ų32.13	ψ5/0	\$50.15	ψ37.137	ψ55.00	φ 10103
Tier 1	100	\$8.40	\$41.14	\$43.18	\$46.25	\$60.50	\$63.50	\$66.25	\$69.25	\$72.25
Tier 2		\$162.57	\$74.61	\$75.63	\$77.42	\$267.00	\$279.75	\$291.75	\$303.75	\$316.50
Tier 3		·	\$167.41	\$170.84	\$176.22	-	-	-	-	-
Subtotal Variable Charge		\$170.97	\$283.15	\$289.64	\$299.88	\$327.50	\$343.25	\$358.00	\$373.00	\$388.75
WAC Charge*	100	\$123.48	\$8.93	\$17.87	\$29.04	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$310.10	\$320.54	\$337.30	\$361.07	\$362.28	\$379.38	\$395.57	\$412.08	\$429.38
\$ Change			\$10.44	\$16.76	\$23.77	\$1.21	\$17.10	\$16.19	\$16.51	\$17.30
Percent Change			3%	5%	7%	0%	5%	4%	4%	4%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 31. Base Scenario: Sample Commercial Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				COM	/IERCIAL					
2" METER, 30 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 30	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.98	\$73.81	\$76.78	\$79.83
Tier 1 Tier 2		\$8.40 <u>\$36.13</u>								
Subtotal Variable Charge		\$44.53	\$80.40	\$82.50	\$86.10	\$85.80	\$90.00	\$93.90	\$98.40	\$102.60
WAC Charge*	30	\$37.04	\$2.10	\$4.20	\$6.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$126.27	\$146.65	\$153.81	\$165.38	\$154.13	\$160.98	\$167.71	\$175.18	\$182.43
\$ Change			\$20.38	\$7.16	\$11.57	(\$11.25)	\$6.85	\$6.73	\$7.47	\$7.25
Percent Change			16%	5%	8%	-7%	4%	4%	4%	4%
2" METER, 100 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 100	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.98	\$73.81	\$76.78	\$79.83
Tier 1		\$8.40								
Tier 2		\$162.57						4		
Subtotal Variable Charge		\$170.97	\$268.00	\$275.00	\$287.00	\$286.00	\$300.00	\$313.00	\$328.00	\$342.00
WAC Charge*	100	\$123.48	\$7.00	\$14.00	\$23.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$339.14	\$339.15	\$356.11	\$382.38	\$354.33	\$370.98	\$386.81	\$404.78	\$421.83
\$ Change			\$0.01	\$16.96	\$26.27	(\$28.05)	\$16.65	\$15.83	\$17.97	\$17.05
Percent Change			0%	5%	7%	-7%	5%	4%	5%	4%
2" METER, 300 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 300	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.98	\$73.81	\$76.78	\$79.83
Tier 1		\$8.40								
Tier 2		\$523.83								
Subtotal Variable Charge		\$532.23	\$804.00	\$825.00	\$861.00	\$858.00	\$900.00	\$939.00	\$984.00	\$1,026.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$947.36	\$889.15	\$934.11	\$1,002.38	\$926.33	\$970.98	\$1,012.81	\$1,060.78	\$1,105.83
\$ Change			(\$58.21)	\$44.96	\$68.27	(\$76.05)	\$44.65	\$41.83	\$47.97	\$45.05
Percent Change			-6%	5%	7%	-8%	5%	4%	5%	4%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 32. Base Scenario: Sample Commercial with Fire Line Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				COMMERCIAL	. WITH FIRE LI	NE				
2" METER, 30 CCF/MONTH,	4" FIRE I	LINE								
Fixed Charge	<u>Use</u>	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.98	\$73.81	\$76.78	\$79.83
Variable Charge	30									
Tier 1		\$8.40								
Tier 2		\$36.13	400.40	400 =0	405.40	40= 00	400.00	400.00	400.40	4400.00
Subtotal Variable Charge		\$44.53	\$80.40	\$82.50	\$86.10	\$85.80	\$90.00	\$93.90	\$98.40	\$102.60
WAC Charge*	<u>30</u>	\$37.04	\$2.10	\$4.20	\$6.90	<u>\$0.00</u>	\$0.00	<u>\$0.00</u>	<u>\$0.00</u>	\$0.00
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$24.89	\$25.96	\$27.04	\$28.13	\$29.25
Total Monthly Water Bill		\$165.35	\$263.38	\$341.46	\$367.75	\$179.02	\$186.94	\$194.75	\$203.31	\$211.68
\$ Change			\$98.03	\$78.08	\$26.29	(\$188.73)	\$7.92	\$7.81	\$8.56	\$8.37
Percent Change			59%	30%	8%	-51%	4%	4%	4%	4%
2" METER, 100 CCF/MONTH	I. 4" FIRE	LINE								
Fixed Charge	<u>Use</u>	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.98	\$73.81	\$76.78	\$79.83
Variable Charge	100									
Tier 1		\$8.40								
Tier 2		<u>\$162.57</u>								
Subtotal Variable Charge		\$170.97	\$268.00	\$275.00	\$287.00	\$286.00	\$300.00	\$313.00	\$328.00	\$342.00
WAC Charge*	<u>100</u>	\$123.48	\$7.00	\$14.00	\$23.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$24.89	\$25.96	\$27.04	\$28.13	\$29.25
Total Monthly Water Bill		\$378.23	\$455.88	\$543.76	\$584.75	\$379.22	\$396.94	\$413.85	\$432.91	\$451.08
\$ Change			\$77.65	\$87.88	\$40.99	(\$205.53)	\$17.72	\$16.91	\$19.06	\$18.17
Percent Change			21%	19%	8%	-35%	5%	4%	5%	4%
2" METER, 300 CCF/MONTH	I. 4" FIRE	LINE								
Fixed Charge	<u>Use</u>	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.98	\$73.81	\$76.78	\$79.83
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		<u>\$523.83</u>								
Subtotal Variable Charge		\$532.23	\$804.00	\$825.00	\$861.00	\$858.00	\$900.00	\$939.00	\$984.00	\$1,026.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$24.89	\$25.96	\$27.04	\$28.13	\$29.25
Total Monthly Water Bill		\$986.45	\$1,005.88	\$1,121.76	\$1,204.75	\$951.22	\$996.94	\$1,039.85	\$1,088.91	\$1,135.08
\$ Change			\$19.43	\$115.88	\$82.99	(\$253.53)	\$45.72	\$42.91	\$49.06	\$46.17
		1	2%	12%	7%	-21%	5%	4%	5%	4%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 33. Base Scenario: Sample Irrigation Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				IRRIG	ATION					
2" METER, 150 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 150	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.98	\$73.81	\$76.78	\$79.83
Tier 1		\$8.40								
Tier 2		<u>\$252.88</u>								
Subtotal Variable Charge		\$261.28	\$430.50	\$442.50	\$462.00	\$442.50	\$466.50	\$487.50	\$511.50	\$534.00
WAC Charge*	150	\$185.22	\$10.50	\$21.00	\$34.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$491.20	\$505.15	\$530.61	\$568.88	\$510.83	\$537.48	\$561.31	\$588.28	\$613.83
\$ Change			\$13.95	\$25.46	\$38.27	(\$58.05)	\$26.65	\$23.83	\$26.97	\$25.55
Percent Change			3%	5%	7%	-10%	5%	4%	5%	4%
2" METER, 300 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.98	\$73.81	\$76.78	\$79.83
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		<u>\$523.83</u>								
Subtotal Variable Charge		\$532.23	\$861.00	\$885.00	\$924.00	\$885.00	\$933.00	\$975.00	\$1,023.00	\$1,068.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$947.36	\$946.15	\$994.11	\$1,065.38	\$953.33	\$1,003.98	\$1,048.81	\$1,099.78	\$1,147.83
\$ Change			(\$1.21)	\$47.96	\$71.27	(\$112.05)	\$50.65	\$44.83	\$50.97	\$48.05
Percent Change			0%	5%	7%	-11%	5%	4%	5%	4%
2" METER, 500 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.98	\$73.81	\$76.78	\$79.83
Variable Charge	500									
Tier 1		\$8.40								
Tier 2		<u>\$885.09</u>								
Subtotal Variable Charge		\$893.49	\$1,435.00	\$1,475.00	\$1,540.00	\$1,475.00	\$1,555.00	\$1,625.00	\$1,705.00	\$1,780.00
WAC Charge*	500	\$617.40	\$35.00	\$70.00	\$115.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$1,555.58	\$1,534.15	\$1,612.11	\$1,727.38	\$1,543.33	\$1,625.98	\$1,698.81	\$1,781.78	\$1,859.83
\$ Change			(\$21.43)	\$77.96	\$115.27	(\$184.05)	\$82.65	\$72.83	\$82.97	\$78.05
Percent Change			-1%	5%	7%	-11%	5%	4%	5%	4%

 $^{^{\}ast}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

SECTION 7: DROUGHT RATES

Drought Rate Background

Drought rates are designed to recover revenue shortfalls as well as to achieve a targeted reduction in water consumption. During times of drought, a water utility has two core objectives: 1) to reduce the amount of water customers consume, and 2) to maintain an adequate amount of revenue to continue operations. The two competing objectives work against each other because as less water is sold the more difficult it is to maintain adequate revenue to cover an agency's the operating costs. Water agencies have many fixed expenses that must be paid regardless of the amount of water that is used. Agencies can combat lost revenue by using reserves (typically a rate stabilization fund) and by implementing drought rates. Drought rates recognize that rates need to account for net revenue loss due to reduced water sales.

Water Conservation Plan

The City's Water Conservation plan as outlined in Section 13.36 of the Municipal Code consists of five phases. Phase I is in effect at all times, and in an imminent drought situation the City Council may be asked to consider putting Phase II through V in effect depending on the severity of the water supply shortage. The plan is outlined as follows:

Phase I – No water waster policy

There is in effect at all times in the city a "no water waste" policy which is summarized as follows:

- No hose washing of sidewalks, walkways, driveways, or parking areas, use a broom instead
- No watering of lawns between the hours of 9:00 a.m. 6:00 p.m.
- Decorative fountains shall have water recirculation system
- Local restaurants may only serve water per customers request
- No water customer of the department shall permit water to leak from any facility on his or her premises

Phase II - Mandatory Reduction of Water Usage for Businesses and Households

- The use of potable water to clean, fill or maintain levels in decorative exterior fountains or similar exterior structures is prohibited.
- Lakes or ponds. The use of potable water to fill decorative lakes or ponds is prohibited.

 The use of potable water for landscape irrigation shall only be permitted on Tuesdays, Thursdays and Saturdays, for no more than ten minutes per watering station per permitted irrigation day

Phase III

- The use of potable water to clean, fill or maintain levels in decorative fountains or similar structures, whether on the interior or exterior of a site, is prohibited.
- Landscape irrigation days and durations. The use of potable water to irrigate any landscaped or vegetated areas shall only be permitted on Tuesdays and Saturdays, for no more than ten minutes per watering station per permitted irrigation day

Phase IV

• The use of potable water to irrigate any landscaped or vegetated areas shall only be permitted on Saturdays, for no more than fifteen minutes per watering station

Phase V

• The use of potable water to irrigate any landscaped or vegetated areas shall only be permitted on the first and third Saturdays of each month

2009 Water Shortage

As a result of the California water shortage in August 2009, the City Council declared mandatory water conservation. In the first phase of the Department's outreach efforts, each customer was mailed a letter explaining the new mandatory water conservation phase. The letter included the need for mandatory water conservation, the new watering schedule, and tips for conserving water inside and outside their homes. Residents were also provided with links to the Department and Metropolitan "Be Water Wise" websites for water conservation tips. The Department also set up a "Report Water Waste" anonymous hotline and web form so that customers can anonymously report water waste. The second phase of the Department's outreach efforts consisted of heavy emphasis on publicizing the new mandatory three day a week watering schedule. The Department limited landscape irrigation in the City to three days per week, Tuesdays, Thursdays and Saturdays, ten minutes per irrigation station, known as the "3 Days will Keep it Green" campaign. The City achieved a 17 percent reduction of water use within six months of starting this campaign.

Base Scenario: Proposed Drought Rates

In response to the governor's declaration of a State water emergency and in anticipation of possible mandatory reductions, BWA developed drought rates based on the proposed potable and recycled rates developed in this study. The drought rates could be implemented during

mandatory restriction declarations by the City Council. The proposed draft rates are based on four stages of curtailment, ranging from 20 to 50 percent of overall reduction. The draft rate is a charge per hcf for all water consumption. The drought rates were calculated as follows:

Using 2014/15 estimated total consumption as a base year, Table 34 estimates the total amount of conservation by customer category based on the various curtailment levels. For the residential tiers, higher curtailment levels are assumed in the higher tiers, and less in lower tiers.

Table 34. Base Scenario: Drought Rates - Projected Reduced Consumption Based on 2014/15 Consumption

		% of Curtailment Target	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment	Target		0%	20%	30%	40%	50%
CURTAILME	ENT BY TIER						
Single-Fami	ly Residential						
Tier 1	0 - 6 hcf	75%	0.0%	-15.0%	-22.5%	-30.0%	-37.5%
Tier 2	6.1 - 12 hcf	100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Tier 3	12.1 - 25 hcf	115%	0.0%	-23.0%	-34.5%	-46.0%	-57.5%
Tier 4	Over 25 hcf	140%	0.0%	-28.0%	-42.0%	-56.0%	-70.0%
Multi-Famil	y Residential						
Tier 1	0 - 5 hcf	75%	0.0%	-15.0%	-22.5%	-30.0%	-37.5%
Tier 2	Over 5 hcf	140%	0.0%	-28.0%	-42.0%	-56.0%	-70.0%
Commercia	I	100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Irrigation		100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
WATER SAL	ES WITH CURTAILM	IENT (HCF)					
	ly Residential		2014/15 Proj. Use				
Tier 1	0 - 6 hcf		1,569,829	1,334,350	1,216,620	1,098,880	981,140
Tier 2	6.1 - 12 hcf		1,202,672	962,140	841,870	721,600	601,340
Tier 3	12.1 - 25 hcf		1,283,054	987,950	840,400	692,850	545,300
Tier 4	Over 25 hcf		731,661	<u>526,800</u>	424,360	321,930	219,500
Subtotal	0 10. 20 110.		4,787,216	3,811,240	3,323,250	2,835,260	2,347,280
	from Base Year		0.0%	-20.4%	-30.6%	-40.8%	-51.0%
Marile: Foreil	v Bosidontial						
Tier 1	y Residential 0 - 5 hcf		2 777 601	2 260 060	2,152,640	1 044 220	1,736,000
Tier 1	O - 5 hcf		2,777,601	2,360,960 1.160.150	2,152,640	1,944,320 708.980	483.400
Tier 2 Subtotal	Over 5 ncr		<u>1,611,321</u> 4,388,922	1,160,150 3,521,110	934,570 3,087,210	<u>708,980</u> 2,653,300	<u>483,400</u> 2,219,400
	n from Base Year		4,388,922	3,521,110 -19.8%	-12.3%	-14.1%	2,219,400 -16.4%
70 110 44001011	.,		0.070	13.670	12.5,0	111270	201.770
Commercia	I		2,243,447	1,794,760	1,570,410	1,346,070	1,121,720
% Reduction	from Base Year		0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Irrigation			543,876	435,100	380,710	326,330	271,940
% Reduction	from Base Year		0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Estimated T	otal Water Sales		11,963,461	9,562,210	8,361,580	7,160,960	5,960,340
% Reduction	from Base Year		0.0%	-20.1%	-30.1%	-40.1%	-50.2%

Table 35 estimates the total 2014/15 variable revenues the City anticipates collecting under normal (non-drought conditions) and then calculates the net revenue lost for each of the four stages.

Table 35. Base Scenario: Drought Rates - Projected Reduced Revenues Based on Reduced Consumption

	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment Target	0%	20%	30%	40%	50%
ANNUAL WATER SALES (HCF)					
Single-Family Residential	2014/15 Proj. Use				
Tier 1	1,569,829	1,334,350	1,216,620	1,098,880	981,140
Tier 2	1,202,672	962,140	841,870	721,600	601,340
Tier 3	1,283,054	987,950	840,400	692,850	545,300
Tier 4	731,661	526,800	424,360	321,930	219,500
Subtotal	4,787,216	3,811,240	3,323,250	2,835,260	2,347,280
Multi-Family Residential					
Tier 1	2,777,601	2,360,960	2,152,640	1,944,320	1,736,000
Tier 2	1,611,321	1,160,150	934,570	708.980	483,400
Subtotal	4,388,922	3,521,110	3,087,210	2,653,300	2,219,400
Commercial	2,243,447	1,794,760	1,570,410	1,346,070	1,121,720
Irrigation	543,876	435,100	380,710	326,330	271,940
Total Water Sales	11,963,461	9,562,210	8,361,580	7,160,960	5,960,340
VARIABLE RATES	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014
Single-Family Residential					
Tier 1	\$2.31	\$2.31	\$2.31	\$2.31	\$2.31
Tier 2	\$2.84	\$2.84	\$2.84	\$2.84	\$2.84
Tier 3	\$3.22	\$3.22	\$3.22	\$3.22	\$3.22
Tier 4	\$3.90	\$3.90	\$3.90	\$3.90	\$3.90
Multi-Family Residential					
Tier 1	\$2.42	\$2.42	\$2.42	\$2.42	\$2.42
Tier 2	\$3.56	\$3.56	\$3.56	\$3.56	\$3.56
Commercial	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86
Irrigation	\$2.95	\$2.95	\$2.95	\$2.95	\$2.95
REVENUES WITH CURTAILMENT					
Single-Family Residential	40.000.00	An ann a :-	40.010.0	A2 =22 +:-	40.000
Tier 1	\$3,626,305	\$3,082,349	\$2,810,392	\$2,538,413	\$2,266,433
Tier 2	3,415,588	2,732,478	2,390,911	2,049,344	1,707,806
Tier 3	4,131,434	3,181,199	2,706,088	2,230,977	1,755,866
Tier 4	2,853,478	2,054,520	1,655,004	1,255,527	<u>856,050</u>
Subtotal	14,026,805	11,050,545	9,562,395	8,074,261	6,586,155
Multi-Family Residential	A	A	A	A	A
Tier 1	\$6,721,794	\$5,713,523	\$5,209,389	\$4,705,254	\$4,201,120
Tier 2	5,736,303	4,130,134	3,327,069	2,523,969	1,720,904
Subtotal	12,458,097	9,843,657	8,536,458	7,229,223	5,922,024
Commercial	\$6,416,258	\$5,133,014	\$4,491,373	\$3,849,760	\$3,208,119
Irrigation	\$1,604,434	\$1,283,545	\$1,123,095	\$962,674	\$802,223
Total	\$34,505,595	\$27,310,761	\$23,713,320	\$20,115,918	\$16,518,521
Revenue Loss with Curtailment	\$0	\$7,194,834	\$10,792,275	\$14,389,677	\$17,987,074

The annual revenue requirements during a drought may also fluctuate. Some of the City's expenses are variable and are reduced as less water is sold. On the other hand, the water utility may also incur additional expenses, such as increased conservation program costs and additional staff for enforcement. Table 36 calculates the adjusted revenue requirements for each stage to include the net revenues lost and the additional costs for conservation and outreach. The additional revenue requirement is divided by the estimated total consumption for each stage to derive a drought charge per hcf.

For example, if the City declared a Stage 1: 20% Curtailment Target in 2014/15, the water utility would lose approximately \$7 million in water sales revenue due to the restrictions. To recover the lost revenue, the drought rate for all consumption is \$0.76 per hcf as shown on Table 36.

Table 36. Base Scenario: Projected Drought Rates for 2014/15

	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment Target	0%	20%	30%	40%	50%
Water Sales Impact (hcf) Reduced Water Sales (hcf) Water Sales with Curtailment (hcf)	0 11,963,461	2,392,700 9,570,761	3,589,000 8,374,461	4,785,400 7,178,061	5,981,700 5,981,761
Add'l Revenue Requirement Water Sales Revenue Loss Reduced O&M Add'l Conservation Program Costs Total Add'l Revenue Requirement	\$0 \$0 \$0 \$0	\$7,195,000 \$0 <u>\$100,000</u> \$7,295,000	\$10,792,000 \$0 <u>\$200,000</u> \$10,992,000	\$14,390,000 \$0 <u>\$300,000</u> \$14,690,000	\$17,987,000 \$0 <u>\$400,000</u> \$18,387,000
DROUGHT CHARGE PER HCF		\$0.76	\$1.31	\$2.05	\$3.07

Prior to implementation, BWA recommends that the City first develop a clear process and formula for implementing the drought rates. The City's current Water Conservation Plan includes five stages of water use restrictions but does not identify specific reduction targets. The curtailment levels used for the proposed drought rates are based on input from City staff.

It is important to emphasize that drought rates alone will not achieve the desired reduction levels amongst customers. The City will also need to implement a considerable outreach and education campaign to encourage water conservation. If the drought conditions persists or becomes more severe, the GWP may also have to consider enforcement penalties or fines and other options to considerably decrease water use.

SECTION 8: RATE SCENARIOS

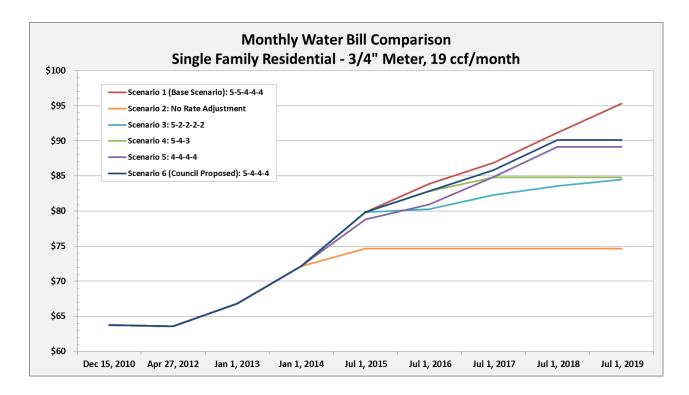
In addition to the Base Scenario, the City evaluated various revenue adjustment scenarios to determine the impact on the water utility's overall finances and the impact to customers. The City Council proposed a hybrid scenario (Scenario 6) at the May 13, 2014 City Council meeting. The scenarios are as follows:

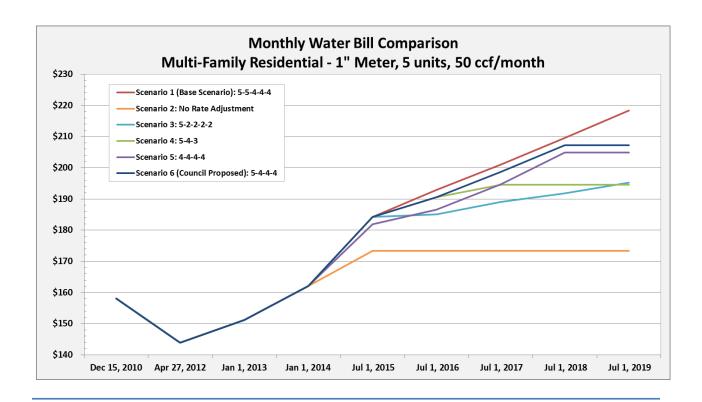
Scenario 1 (Base Scenario)	5%, 5%, 4%, 4%, 4%
Saamaria 2	No Povenue Adivetment Pete Structure Changes Only
Scenario 2	No Revenue Adjustment, Rate Structure Changes Only
Scenario 3	5%, 2%, 2%, 2%
Scenario 4	5%, 4%, 3%
Scenario 5	4%, 4%, 4%, 4%
Scenario 6 (Council Proposed)	5%, 4%, 4%, 4%

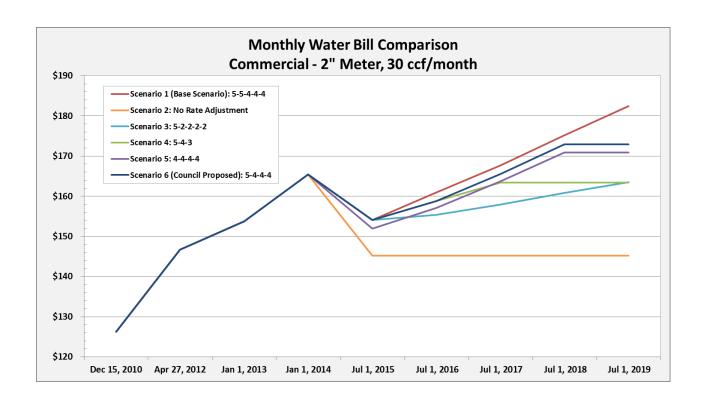
The following table compares the financial impact of the six rate adjustment scenarios.

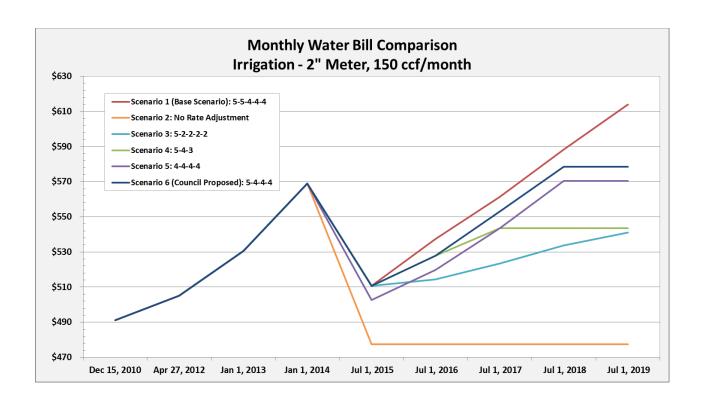
	Scenario 1 (Base Scenario)	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6 Council Proposed
Bill/Revenue Increase Considerations	5,5,4,4,4%	Structual Fix Only - No PayGo	5,2,2,2,2%	5,4,3%	4,4,4,4%	5,4,4,4%
Prop 218 Compliant	Yes	Yes	Yes	Yes	Yes	Yes
Debt Service Coverage	Yes	No	Yes	Yes	Yes	Yes
PayGo Capital	\$13.90	No	\$13.90	\$13.90	\$13.90	\$13.90
FY2015 Net Income/(Loss) (\$M)	\$1.52	(\$0.35)	\$1.52	\$1.52	\$1.15	\$1.52
FY2016 Net Income/(Loss) (\$M)	\$4.43	\$0.11	\$2.97	\$3.94	\$3.55	\$3.94
FY2017 Net Income/(Loss) (\$M)	\$4.83	(\$1.57)	\$2.30	\$3.81	\$3.91	\$4.32
FY2018 Net Income/(Loss) (\$M)	\$4.90	(\$3.68)	\$1.23	\$1.73	\$3.94	\$4.37
FY2019 Net Income/(Loss) (\$M)	\$5.40	(\$5.47)	\$0.51	(\$0.04)	\$2.18	\$2.61
FY2015 Cash Reserves (\$M)	(\$7.45)	(\$9.32)	(\$7.45)	(\$7.45)	(\$7.82)	(\$7.45)
FY2016 Cash Reserves (\$M)	(\$1.92)	(\$6.61)	(\$3.38)	(\$2.41)	(\$3.17)	(\$2.41)
FY2017 Cash Reserves (\$M)	\$2.14	(\$4.89)	(\$1.85)	\$0.63	(\$0.03)	\$1.14
FY2018 Cash Reserves (\$M)	\$6.24	(\$5.22)	(\$1.42)	\$1.55	\$3.11	\$4.71
FY2019 Cash Reserves (\$M)	\$11.29	(\$6.89)	(\$1.26)	\$1.16	\$4.95	\$6.97

The following charts include monthly bill comparisons for a sample of customers for each of the six scenarios.









SECTION 9: RATE SCENARIO #2

Scenario #2 does not include any revenue adjustments, only modifications to the rate structure. The rate structure modifications include updating the meter ratios, changing the tier breakpoints for the residential variable charges, updating the fire line charges, and reducing the discount for recycled water.

Table 37 presents a summary of the water fund's finances for the next five years if no rate adjustments are enacted. Based on the projections, without any revenue adjustments, the water fund will continue to run an operating deficit and negative cash balance through the end of the five year period. The cash balance at the end of 2018/19 is projected at negative \$6.89 million. Additionally, beginning in 2017/18 the water enterprise will fail to meet its debt service coverage requirements.

Table 37. Scenario #2: No Rate Adjustments – Cash Flow Projection

	Projected			Five-Year Plan		
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Assumptions:						
Revenue Adjustment (Assumes 12 months of rate increases)		0.0%	0.0%	0.0%	0.0%	0.0%
Interest Earnings Rate	0.5%	0.3%	0.5%	0.5%	1.0%	1.09
Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Operating Revenues - Charges for Services						
Potable Sales Based on 12 Months of Increases	\$44,517,200	\$44,740,000	\$44,918,000	\$45,143,000	\$45,369,000	\$45,596,000
Recycled Water Sales Based on 12 Months of Increases	1,955,000	1,965,000	1,973,000	1,983,000	1,993,000	2,003,000
Total Water Sales Based on 12 Months of Increases	46,472,200	46,705,000	46,891,000	47,126,000	47,362,000	47,599,000
Operating Revenues - Charges for Services						
Potable Sales	\$44,517,200	\$44,695,000	\$44,918,000	\$45,143,000	\$45,369,000	\$45,596,000
Recycled Sales	1,955,000	1,963,000	1,973,000	1,983,000	1,993,000	2,003,000
Fireline Credit		(3,400,000)		-		-
Total Retail Sales	46,472,200	43,258,000	46,891,000	47,126,000	47,362,000	47,599,000
Operating Expenses						
Production	25,045,200	24,092,800	25,186,600	26,096,500	27,455,500	28,405,200
Transmission and Distribution	10,663,200	11,369,400	12,394,700	12,633,500	13,058,600	13,582,500
Customer Services	2,797,200	2,750,000	2,819,300	2,903,700	2,990,700	3,080,500
Depreciation	5,403,600	5,254,500	5,825,000	6,350,000	6,875,000	7,400,000
Total Operating Expenses	43,909,200	43,466,700	46,225,600	47,983,700	50,379,800	52,468,200
Operating Income	2,563,000	(208,700)	665,400	(857,700)	(3,017,800)	(4,869,200
New Occuption December of Francisco						
Non-Operating Revenues and Expenses	140,000	1 040 700	1 040 700	1 740 700	1 740 700	1 740 700
Revenue from Customer Paid Projects Non-Operating Income	1,541,100	1,940,700 1,435,000	1,940,700 985,000	1,740,700 985,000	1,740,700 985,000	1,740,700 985,000
Non-Operating Income Non-Operating Expense (Interest Expense)	(3,118,000)	(3,514,300)	(3,477,600)	(3,437,800)	(3,384,800)	(3,330,000
Total Non-operating Revenues, net	(1,436,900)	(138,600)	(551,900)	(712,100)	(659,100)	(604,300
Net Income Before Transfers	1,126,100	(347,300)	113,500	(1,569,800)	(3,676,900)	(5,473,500
		(347,300)	115,500	(1,509,800)	(3,676,900)	(3,473,300
Gladys Drive Reimbursement	1,000,000	(247.200)	112 500	(1 500 000)	(2.676.000)	/F 472 F00
Net Income (Loss)	126,100	(347,300)	113,500	(1,569,800)	(3,676,900)	(5,473,500)
Beginning Unrestricted Cash Reserves	(14,186,600)	(10,218,400)	(9,318,400)	(6,605,600)	(4,891,100)	(5,218,700)
Add Non Cash Expense - Depreciation	5,403,600	5,254,500	5,825,000	6,350,000	6,875,000	7,400,000
Net Unrestricted Cash Reserves	(\$8,783,000)	(4,963,900)	(3,493,400)	(255,600)	1,983,900	2,181,300
Add Net Income	126,100	(347,300)	113,500	(1,569,800)	(3,676,900)	(5,473,500)
Add Bond Proceeds	-	-	-	-		-
Less Bond Principal Payments - 2008 Bonds	(1,210,000)	(1,245,000)	(1,285,000)	(1,325,000)	(1,370,000)	(1,420,000
Less Bond Principal Payments - 2012 Bonds	(272,000)	(034 500)	-	-	(415,000)	(435,000
Less General Plant Allocation Less Capital Expenditures - Customer Paid	(272,000) (79,500)	(821,500) (1,940,700)	(1,940,700)	(1,740,700)	(1,740,700)	(1,740,700
Revenues Less Expenses	(1,435,400)	(4,354,500)	(3,112,200)	(4,635,500)	(7,202,600)	(9,069,200)
·						
Ending Unrestricted Cash Reserves	(10,218,400)	(9,318,400)	(6,605,600)	(4,891,100)	(5,218,700)	(6,887,900)
Beginning Bond Proceeds	28,525,100	21,014,082	5,554,874	_	_	_
Bonds Proceeds	,- 25,200	,-1 ,,552		-	-	-
Less Capital Expenditures - Bonds	(7,511,018)	(15,459,208)	(5,554,874)	-	-	-
Ending Bond Proceeds	21,014,082	5,554,874	-	-	-	-
Debt Service Coverage - Min. 1.25	2.20	1.36	1.57	1.36	0.94	0.68
Debt Service Coverage - Will. 1.23 Debt Service Coverage Met	yes	yes	yes	yes	no	no
Minimum Cash Reserve Target	11,300,000	11,300,000	11,300,000	11,300,000	11,300,000	11,300,000

^{1 -} Revenues for 2014/15 have been adjusted for September 1, 2014 effective date.

Scenario #2: Proposed Rates

The following tables shows a 5-year schedule of proposed water rates for Scenario #2 incorporating a) the proposed rate structure adjustments, and b) the revenue recovery allocations that fairly apportion costs to all customers. The first rate adjustment will be effective September 1, 2014.

Table 38. Scenario #2: Proposed Potable Water Rates

MON	ITHLY WATE	R CUSTOME	R CHARGES					
	Current	Projected						
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
5/8"	\$21.18	\$19.80	\$19.80	\$19.80	\$19.80	\$19.80		
3/4"	\$24.83	\$25.13	\$25.13	\$25.13	\$25.13	\$25.13		
1.0"	\$32.15	\$33.11	\$33.11	\$33.11	\$33.11	\$33.11		
1.5"	\$50.43	\$54.41	\$54.41	\$54.41	\$54.41	\$54.41		
2.0"	\$72.38	\$65.06	\$65.06	\$65.06	\$65.06	\$65.06		
3.0"	\$123.58	\$224.78	\$224.78	\$224.78	\$224.78	\$224.78		
4.0"	\$196.72	\$437.74	\$437.74	\$437.74	\$437.74	\$437.74		
6.0"	\$379.59	\$810.42	\$810.42	\$810.42	\$810.42	\$810.42		
8.0"	\$599.02	\$1,875.22	\$1,875.22	\$1,875.22	\$1,875.22	\$1,875.22		
10.0"	\$855.03	\$2,940.02	\$2,940.02	\$2,940.02	\$2,940.02	\$2,940.02		
12.0"	-	\$2,940.02	\$2,940.02	\$2,940.02	\$2,940.02	\$2,940.02		

DAILY WATER CI	JSTOMER CHA	ARGES (MONT	HLY CHARGE	/30 DAYS)				
	Current	Projected						
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
5/8"	\$0.71	\$0.66	\$0.66	\$0.66	\$0.66	\$0.66		
3/4"	\$0.83	\$0.84	\$0.84	\$0.84	\$0.84	\$0.84		
1.0"	\$1.07	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10		
1.5"	\$1.68	\$1.81	\$1.81	\$1.81	\$1.81	\$1.81		
2.0"	\$2.41	\$2.17	\$2.17	\$2.17	\$2.17	\$2.17		
3.0"	\$4.12	\$7.49	\$7.49	\$7.49	\$7.49	\$7.49		
4.0"	\$6.56	\$14.59	\$14.59	\$14.59	\$14.59	\$14.59		
6.0"	\$12.65	\$27.01	\$27.01	\$27.01	\$27.01	\$27.01		
8.0"	\$19.97	\$62.51	\$62.51	\$62.51	\$62.51	\$62.51		
10.0"	\$28.50	\$98.00	\$98.00	\$98.00	\$98.00	\$98.00		
12.0"	-	\$98.00	\$98.00	\$98.00	\$98.00	\$98.00		

	MONTHLY VA	RIABLE CHAR	GES - DOES N	OT INCLUD	E WATER A	DJUSTMEN	T CHARGES					
	SINGLE FAMILY RESIDENTIAL											
	Current	Proposed	Current			Projected						
	Monthly Tiers	Monthly Tiers	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19				
Tier 1	0 - 6.26 hcf	0 - 6 hcf	\$1.72	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15				
Tier 2	6.27 - 12.52 hcf	6.1 - 12 hcf	\$2.18	\$2.63	\$2.63	\$2.63	\$2.63	\$2.63				
Tier 3	12.53 - 31.03 hcf	12.1 - 25 hcf	\$3.18	\$2.98	\$2.98	\$2.98	\$2.98	\$2.98				
Tier 4	31.04 - 40.28 hcf	Over 25 hcf	\$3.54	\$3.60	\$3.60	\$3.60	\$3.60	\$3.60				
Tier 5	Over 40.28 hcf		\$4.13	-	-	-	-	-				

	MULTI- FAMILY RESIDENTIAL											
	Current	Proposed	Current (1)	Projected								
	Monthly Tiers	Monthly Tiers	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19				
Tier 1	0 - 5.10 hcf	0 - 5 hcf	\$1.81	\$2.26	\$2.26	\$2.26	\$2.26	\$2.26				
Tier 2	5.11 - 10.20 hcf	Over 5 hcf	\$3.03	\$3.35	\$3.35	\$3.35	\$3.35	\$3.35				
Tier 3	Over 10.20 hcf		\$3.60	-	-	-	-	-				

COMMERCIAL									
	Current	Projected							
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19			
All Consumption per hcf	\$2.87	\$2.67	\$2.67	\$2.67	\$2.67	\$2.67			

IRRIGATION											
	Current			Projected							
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19					
All Consumption per hcf	\$3.08	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75					

^{1 -} The tier breakpoints for multi-family customers are prorated based on the number of dwelling units for each account.

Table 39. Scenario #2: Proposed Recycled Water Rates

	MONTHLY RECY	CLED WATER	CUSTOMER	CHARGE						
	Current	Projected								
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19				
5/8"	\$15.89	\$16.83	\$16.83	\$16.83	\$16.83	\$16.83				
3/4"	\$18.62	\$21.36	\$21.36	\$21.36	\$21.36	\$21.36				
1.0"	\$24.11	\$28.14	\$28.14	\$28.14	\$28.14	\$28.14				
1.5"	\$37.82	\$46.25	\$46.25	\$46.25	\$46.25	\$46.25				
2.0"	\$54.29	\$55.30	\$55.30	\$55.30	\$55.30	\$55.30				
3.0"	\$92.69	\$191.06	\$191.06	\$191.06	\$191.06	\$191.06				
4.0"	\$147.54	\$372.08	\$372.08	\$372.08	\$372.08	\$372.08				
6.0"	\$284.69	\$688.86	\$688.86	\$688.86	\$688.86	\$688.86				
8.0"	\$449.27	\$1,593.94	\$1,593.94	\$1,593.94	\$1,593.94	\$1,593.94				
10.0"	\$641.27	\$2,499.02	\$2,499.02	\$2,499.02	\$2,499.02	\$2,499.02				
12.0"	-	\$2,499.02	\$2,499.02	\$2,499.02	\$2,499.02	\$2,499.02				

DAILY RECY	CLED WATER CL	JSTOMER CHARG	E (MONTHLY	CHARGE/30 DA	YS)					
	Current	rent Projected								
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19				
5/8"	\$0.53	\$0.56	\$0.56	\$0.56	\$0.56	\$0.56				
3/4"	\$0.62	\$0.71	\$0.71	\$0.71	\$0.71	\$0.71				
1.0"	\$0.80	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94				
1.5"	\$1.26	\$1.54	\$1.54	\$1.54	\$1.54	\$1.54				
2.0"	\$1.81	\$1.84	\$1.84	\$1.84	\$1.84	\$1.84				
3.0"	\$3.09	\$6.37	\$6.37	\$6.37	\$6.37	\$6.37				
4.0"	\$4.92	\$12.40	\$12.40	\$12.40	\$12.40	\$12.40				
6.0"	\$9.49	\$22.96	\$22.96	\$22.96	\$22.96	\$22.96				
8.0"	\$14.98	\$53.13	\$53.13	\$53.13	\$53.13	\$53.13				
10.0"	\$21.38	\$83.30	\$83.30	\$83.30	\$83.30	\$83.30				
12.0"	-	\$83.30	\$83.30	\$83.30	\$83.30	\$83.30				

M	ONTHLY RECY	CLED WATER	VARIABLE C	HARGES								
COMMERCIAL RECYCLED WATER RATE												
	Current			Projected								
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19						
Water Variable Charge												

	IRRIGATION RECYCLED WATER RATE											
	Current			Projected								
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19						
Water Variable Charge	ole Charge \$2.3100 \$2.34 \$2.34 \$2.34 \$2.34 \$2.34											

^{1 -} Beginning in 2014/15, the recycled water customer charge and variable rates will be based on a 15% discount from the potable rates.

Table 40. Scenario #2: Proposed Private Fire Line Rates (1)

	М	ONTHLY PRIVATE FIRE LINE	CUSTOMER	CHARGE								
	Current		Projected									
Fire Line Service Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19						
1" (2)	-	\$7.71	\$7.71	\$7.71	\$7.71	\$7.71						
1-1/2" (2)	-	\$8.53	\$8.53	\$8.53	\$8.53	\$8.53						
2.0"	\$13.4725	\$9.94	\$9.94	\$9.94	\$9.94	\$9.94						
3.0"	\$28.1415	\$15.01	\$15.01	\$15.01	\$15.01	\$15.01						
4.0"	\$202.37	\$23.76	\$23.76	\$23.76	\$23.76	\$23.76						
6.0"	\$395.98	\$55.14	\$55.14	\$55.14	\$55.14	\$55.14						
8.0"	\$633.96	\$109.28	\$109.28	\$109.28	\$109.28	\$109.28						
10.0"	\$917.86	\$190.71	\$190.71	\$190.71	\$190.71	\$190.71						
12.0" (2)	-	\$303.57	\$303.57	\$303.57	\$303.57	\$303.57						

D	AILY PRIVATE	FIRE LINE WATER CUSTOMER C	HARGE (MON	THLY CHARGE/	30 DAYS)	
	Current			Projected		
Fire Line Service Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
1" (2)	-	\$0.26	\$0.26	\$0.26	\$0.26	\$0.26
1-1/2" (2)	-	\$0.28	\$0.28	\$0.28	\$0.28	\$0.28
2.0"	\$0.45	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33
3.0"	\$0.94	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
4.0"	\$6.75	\$0.79	\$0.79	\$0.79	\$0.79	\$0.79
6.0"	\$13.20	\$1.84	\$1.84	\$1.84	\$1.84	\$1.84
8.0"	\$21.13	\$3.64	\$3.64	\$3.64	\$3.64	\$3.64
10.0"	\$30.60	\$6.36	\$6.36	\$6.36	\$6.36	\$6.36
12.0" (2)	-	\$10.12	\$10.12	\$10.12	\$10.12	\$10.12

		MONTHLY F	RIVATE FIRE V	ARIABLE CHA	RGES							
	Current Proposed Projected (3)											
Current Tiers	Jan 1, 2014	Tiers (3)	2014/15	2015/16	2016/17	2017/18	2018/19					
0 - 10 hcf	\$0.9204	All Use	\$2.67	\$2.67	\$2.67	\$2.67	\$2.67					
Over 10 hcf	\$2.0709											

 $[\]bf 1$ - Private fire line rates for 4" service and larger were suspended in January 2014.

^{2 -} Currently has no rate

³ - Beginning in 2014/15, the variable charge for private fire lines will be equal to the potable commercial rate.

Scenario #2: Water Bill Impacts

The following tables show sample bill impacts for a selection of customer profiles for Scenario #2. The proposed revenue adjustments do not imply that each customer will receive the same percentage increase in their bill. The bill impacts will vary for each customer as a result of the proposed fixed meter charge adjustments, the proposed variable rate structure changes, and each individual customer's actual consumption levels. Note that water consumption, particularly for single family customers, typically varies from month to month due to seasonal variations in weather and/or other factors. Hence customers could face a range of impacts throughout the year depending on their level of water use in each billing period.

The sample bill impacts do not include any future WAC increases. The WAC is calculated twice a year and recovers any additional costs of water purchases and energy costs that exceed the annual budget. The WAC can either increase or decrease semi-annually and is based on the cost of purchased water from MWD and the cost of purchased energy for the previous 6 months.

Table 41. Scenario #2: Sample Single Family Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				SINGLE FAMIL	Y RESIDENTIA	L				
3/4" METER, 10 CCF/MON	TH									
Fixed Charge	<u>Use</u>	\$15.66	\$21.97	\$23.01	\$24.83	\$25.13	\$25.13	\$25.13	\$25.13	\$25.13
Variable Charge	10		4	4	4	4	4		4	4
Tier 1		\$8.40	\$9.53	\$9.97	\$10.78	\$12.90	\$12.90	\$12.90	\$12.90	\$12.90
Tier 2		-	\$7.05	\$7.46	\$8.13	\$10.52	\$10.52	\$10.52	\$10.52	\$10.52
Tier 3 Tier 4		-	-	-	-	-	-			_
Tier 5			-	-		_	-	- -	_	_
Subtotal Variable Charge		\$8.40	\$16.58	\$17.43	\$18.92	\$23.42	\$23.42	\$23.42	\$23.42	\$23.42
WAC Charge*	10	\$12.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill	10	\$36.41	\$38.55	\$40.44	\$43.75	\$48.55	\$48.55	\$48.55	\$48.55	\$48.55
•		\$36.41	•	•			•	•	•	
\$ Change			\$2.14	\$1.89	\$3.31	\$4.80	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			6%	5%	8%	11%	0%	0%	0%	0%
3/4" METER, 19 CCF/MON	тн									
Fixed Charge Variable Charge	<u>Use</u> 19	\$15.66	\$21.97	\$23.01	\$24.83	\$25.13	\$25.13	\$25.13	\$25.13	\$25.13
Tier 1		\$8.40	\$9.53	\$9.97	\$10.78	\$12.90	\$12.90	\$12.90	\$12.90	\$12.90
Tier 2		\$16.26	\$11.85	\$12.54	\$13.67	\$15.78	\$15.78	\$15.78	\$15.78	\$15.78
Tier 3		-	\$19.54	\$19.93	\$20.57	\$20.86	\$20.86	\$20.86	\$20.86	\$20.86
Tier 4		-	-	-	-	-	-	-	-	-
Tier 5		÷24.00	<u>-</u>	<u>-</u>	\$45.03	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	Ć40.54
Subtotal Variable Charge		\$24.66	\$40.92	\$42.44		\$49.54	\$49.54	\$49.54	\$49.54	\$49.54
WAC Charge*	<u>19</u>	\$23.46	\$0.71	\$1.36	\$2.26	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$63.78	\$63.60	\$66.81	\$72.12	\$74.67	\$74.67	\$74.67	\$74.67	\$74.67
\$ Change			(\$0.17)	\$3.20	\$5.32	\$2.55	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			0%	5%	8%	4%	0%	0%	0%	0%
3/4" METER, 50 CCF/MON	тн									
Fixed Charge	Use	\$15.66	\$21.97	\$23.01	\$24.83	\$25.13	\$25.13	\$25.13	\$25.13	\$25.13
Variable Charge	50									
Tier 1		\$8.40	\$9.53	\$9.97	\$10.78	\$12.90	\$12.90	\$12.90	\$12.90	\$12.90
Tier 2		\$72.25	\$11.85	\$12.54	\$13.67	\$15.78	\$15.78	\$15.78	\$15.78	\$15.78
Tier 3		-	\$55.90	\$57.01	\$58.86	\$38.74	\$38.74	\$38.74	\$38.74	\$38.74
Tier 4		-	\$30.99	\$31.54	\$32.75	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00
Tier 5 Subtotal Variable Charge		\$80.65	<u>\$37.38</u> \$145.65	<u>\$38.35</u> \$149.42	\$40.10 \$156.16	<u>=</u> \$157.42	<u>=</u> \$157.42	<u>=</u> \$157.42	<u>=</u> \$157.42	\$157.42
WAC Charge*	50	\$61.74	\$4.31	\$8.44	\$130.16	\$0.00	\$0.00	\$0.00	\$0.00	\$137.42
_	<u>50</u>	l — —								
Total Monthly Water Bill		\$158.05	\$171.93	\$180.87	\$194.87	\$182.55	\$182.55	\$182.55	\$182.55	\$182.55
\$ Change			\$13.89	\$8.93	\$14.00	(\$12.32)	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			9%	5%	8%	-6%	0%	0%	0%	0%

^{*} The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 42. Scenario #2: Sample Multi-Family Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				MULTI-FAMIL	Y RESIDENTIA	\L				
1" METER, 5 UNITS, 50 CCF	/MONTH									
Fixed Charge	<u>Use</u>	\$15.66	\$28.46	\$29.79	\$32.15	\$33.11	\$33.11	\$33.11	\$33.11	\$33.11
Variable Charge	50									
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$56.50	\$56.50	\$56.50	\$56.50	\$56.50
Tier 2		\$72.25	\$71.39	\$72.37	\$74.08	\$83.75	\$83.75	\$83.75	\$83.75	\$83.75
Tier 3		-			4400.00	=	<u>-</u>	=		44.40.00
Subtotal Variable Charge		\$80.65	\$112.53	\$115.55	\$120.33	\$140.25	\$140.25	\$140.25	\$140.25	\$140.25
WAC Charge*	<u>50</u>	\$61.74	\$2.94	\$5.88	\$9.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$158.05	\$143.93	\$151.22	\$162.03	\$173.36	\$173.36	\$173.36	\$173.36	\$173.36
\$ Change			(\$14.12)	\$7.29	\$10.81	\$11.33	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			-9%	5%	7%	7%	0%	0%	0%	0%
1" METER, 5 UNITS, 70 CCF	/MONTH									
Fixed Charge	Use	\$15.66	\$28.46	\$29.79	\$32.15	\$33.11	\$33.11	\$33.11	\$33.11	\$33.11
Variable Charge	70									
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$56.50	\$56.50	\$56.50	\$56.50	\$56.50
Tier 2		\$108.38	\$74.61	\$75.63	\$77.42	\$150.75	\$150.75	\$150.75	\$150.75	\$150.75
Tier 3		=	<u>\$64.81</u>	\$66.14	<u>\$68.22</u>	=	=	=	=	=
Subtotal Variable Charge		\$116.78	\$180.55	\$184.94	\$191.88	\$207.25	\$207.25	\$207.25	\$207.25	\$207.25
WAC Charge*	70	\$86.44	\$5.33	\$10.67	\$17.34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$218.87	\$214.34	\$225.40	\$241.37	\$240.36	\$240.36	\$240.36	\$240.36	\$240.36
\$ Change			(\$4.53)	\$11.06	\$15.97	(\$1.01)	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			-2%	5%	7%	0%	0%	0%	0%	0%
1" METER, 5 UNITS, 100 CC	F/MONT	Н								
Fixed Charge	Use	\$15.66	\$28.46	\$29.79	\$32.15	\$33.11	\$33.11	\$33.11	\$33.11	\$33.11
Variable Charge	100	,	,	,				•	•	
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$56.50	\$56.50	\$56.50	\$56.50	\$56.50
Tier 2		\$162.57	\$74.61	\$75.63	\$77.42	\$251.25	\$251.25	\$251.25	\$251.25	\$251.25
Tier 3		Ξ.	\$167.41	\$170.84	\$176.22	-	-	-	-	-
Subtotal Variable Charge		\$170.97	\$283.15	\$289.64	\$299.88	\$307.75	\$307.75	\$307.75	\$307.75	\$307.75
WAC Charge*	100	\$123.48	\$8.93	\$17.87	\$29.04	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$310.10	\$320.54	\$337.30	\$361.07	\$340.86	\$340.86	\$340.86	\$340.86	\$340.86
\$ Change			\$10.44	\$16.76	\$23.77	(\$20.21)	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			3%	5%	7%	-6%	0%	0%	0%	0%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 43. Scenario #2: Sample Commercial Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				COM	/IERCIAL					
2" METER, 30 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 30	\$44.70	\$64.15	\$67.11	\$72.38	\$65.06	\$65.06	\$65.06	\$65.06	\$65.06
Tier 1 Tier 2		\$8.40 <u>\$36.13</u>								
Subtotal Variable Charge		\$44.53	\$80.40	\$82.50	\$86.10	\$80.10	\$80.10	\$80.10	\$80.10	\$80.10
WAC Charge*	30	\$37.04	\$2.10	\$4.20	\$6.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$126.27	\$146.65	\$153.81	\$165.38	\$145.16	\$145.16	\$145.16	\$145.16	\$145.16
\$ Change			\$20.38	\$7.16	\$11.57	(\$20.22)	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			16%	5%	8%	-12%	0%	0%	0%	0%
2" METER, 100 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 100	\$44.70	\$64.15	\$67.11	\$72.38	\$65.06	\$65.06	\$65.06	\$65.06	\$65.06
Tier 1		\$8.40								
Tier 2		\$162.57 \$170.97	\$268.00	\$275.00	\$287.00	\$267.00	\$267.00	\$267.00	\$267.00	\$267.00
Subtotal Variable Charge	100		\$268.00	•		•	\$267.00	•	•	•
WAC Charge*	100	\$123.48		\$14.00	\$23.00	\$0.00		\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$339.14	\$339.15	\$356.11	\$382.38	\$332.06	\$332.06	\$332.06	\$332.06	\$332.06
\$ Change			\$0.01	\$16.96	\$26.27	(\$50.32)	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			0%	5%	7%	-13%	0%	0%	0%	0%
2" METER, 300 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 300	\$44.70	\$64.15	\$67.11	\$72.38	\$65.06	\$65.06	\$65.06	\$65.06	\$65.06
Tier 1		\$8.40								
Tier 2		\$523.83								
Subtotal Variable Charge		\$532.23	\$804.00	\$825.00	\$861.00	\$801.00	\$801.00	\$801.00	\$801.00	\$801.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$947.36	\$889.15	\$934.11	\$1,002.38	\$866.06	\$866.06	\$866.06	\$866.06	\$866.06
\$ Change			(\$58.21)	\$44.96	\$68.27	(\$136.32)	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			-6%	5%	7%	-14%	0%	0%	0%	0%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 44. Scenario #2: Sample Commercial with Fire Line Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/1
				COMMERCIAL	. WITH FIRE L	INE				
2" METER, 30 CCF/MONTH,	4" FIRE	LINE								
Fixed Charge	<u>Use</u>	\$44.70	\$64.15	\$67.11	\$72.38	\$65.06	\$65.06	\$65.06	\$65.06	\$65.06
Variable Charge	30									
Tier 1		\$8.40								
Tier 2		\$36.13								
Subtotal Variable Charge		\$44.53	\$80.40	\$82.50	\$86.10	\$80.10	\$80.10	\$80.10	\$80.10	\$80.10
WAC Charge*	<u>30</u>	\$37.04	\$2.10	\$4.20	\$6.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$23.76	\$23.76	\$23.76	\$23.76	\$23.76
Total Monthly Water Bill		\$165.35	\$263.38	\$341.46	\$367.75	\$168.92	\$168.92	\$168.92	\$168.92	\$168.92
\$ Change			\$98.03	\$78.08	\$26.29	(\$198.83)	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			59%	30%	8%	-54%	0%	0%	0%	0%
2" METER, 100 CCF/MONTH	i, 4" FIRE	LINE								
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$65.06	\$65.06	\$65.06	\$65.06	\$65.06
Variable Charge	100									
Tier 1		\$8.40								
Tier 2		\$162.57								
Subtotal Variable Charge		\$170.97	\$268.00	\$275.00	\$287.00	\$267.00	\$267.00	\$267.00	\$267.00	\$267.00
WAC Charge*	<u>100</u>	\$123.48	\$7.00	\$14.00	\$23.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$23.76	\$23.76	\$23.76	\$23.76	\$23.76
Total Monthly Water Bill		\$378.23	\$455.88	\$543.76	\$584.75	\$355.82	\$355.82	\$355.82	\$355.82	\$355.82
\$ Change			\$77.65	\$87.88	\$40.99	(\$228.93)	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			21%	19%	8%	-39%	0%	0%	0%	0%
2" METER, 300 CCF/MONTH	1, 4" FIRE	LINE								
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$65.06	\$65.06	\$65.06	\$65.06	\$65.06
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		\$523.83								
Subtotal Variable Charge		\$532.23	\$804.00	\$825.00	\$861.00	\$801.00	\$801.00	\$801.00	\$801.00	\$801.00
WAC Charge*	<u>300</u>	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$23.76	\$23.76	\$23.76	\$23.76	\$23.76
Total Monthly Water Bill		\$986.45	\$1,005.88	\$1,121.76	\$1,204.75	\$889.82	\$889.82	\$889.82	\$889.82	\$889.82
\$ Change			\$19.43	\$115.88	\$82.99	(\$314.93)	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			2%	12%	7%	-26%	0%	0%	0%	0%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 45. Scenario #2: Sample Irrigation Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				IRRIG	ATION					
2" METER, 150 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 150	\$44.70	\$64.15	\$67.11	\$72.38	\$65.06	\$65.06	\$65.06	\$65.06	\$65.06
Tier 1		\$8.40								
Tier 2		\$252.88								
Subtotal Variable Charge		\$261.28	\$430.50	\$442.50	\$462.00	\$412.50	\$412.50	\$412.50	\$412.50	\$412.50
WAC Charge*	150	\$185.22	\$10.50	\$21.00	\$34.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$491.20	\$505.15	\$530.61	\$568.88	\$477.56	\$477.56	\$477.56	\$477.56	\$477.56
\$ Change			\$13.95	\$25.46	\$38.27	(\$91.32)	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			3%	5%	7%	-16%	0%	0%	0%	0%
2" METER, 300 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$65.06	\$65.06	\$65.06	\$65.06	\$65.06
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		<u>\$523.83</u>								
Subtotal Variable Charge		\$532.23	\$861.00	\$885.00	\$924.00	\$825.00	\$825.00	\$825.00	\$825.00	\$825.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$947.36	\$946.15	\$994.11	\$1,065.38	\$890.06	\$890.06	\$890.06	\$890.06	\$890.06
\$ Change			(\$1.21)	\$47.96	\$71.27	(\$175.32)	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			0%	5%	7%	-16%	0%	0%	0%	0%
2" METER, 500 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$65.06	\$65.06	\$65.06	\$65.06	\$65.06
Variable Charge	500									
Tier 1		\$8.40								
Tier 2		\$885.09								
Subtotal Variable Charge		\$893.49	\$1,435.00	\$1,475.00	\$1,540.00	\$1,375.00	\$1,375.00	\$1,375.00	\$1,375.00	\$1,375.00
WAC Charge*	<u>500</u>	\$617.40	\$35.00	\$70.00	\$115.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$1,555.58	\$1,534.15	\$1,612.11	\$1,727.38	\$1,440.06	\$1,440.06	\$1,440.06	\$1,440.06	\$1,440.06
\$ Change			(\$21.43)	\$77.96	\$115.27	(\$287.32)	\$0.00	\$0.00	\$0.00	\$0.00
Percent Change			-1%	5%	7%	-17%	0%	0%	0%	0%

^{*} The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Scenario #2: Proposed Drought Rates

In response to the governor's declaration of a State water emergency and in anticipation of possible mandatory reductions, BWA developed drought rates based on the proposed potable and recycled rates developed in this study. The drought rates could be implemented during mandatory restriction declarations by the City Council. Using 2014/15 estimated total consumption as the base year, the proposed draft rates are based on four stages of curtailment, ranging from 20 to 50 percent of overall reduction. The draft rate is a charge per hcf for all water consumption. Tables 46 through 48 calculate the drought rates under Scenario #2.

Table 46. Scenario #2: Drought Rates - Projected Reduced Consumption Based on 2014/15 Consumption

		% of Curtailment Target	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment	t Target		0%	20%	30%	40%	50%
CURTAILME	ENT BY TIER						
Single-Fami	ly Residential						
Tier 1	0 - 6 hcf	75%	0.0%	-15.0%	-22.5%	-30.0%	-37.5%
Tier 2	6.1 - 12 hcf	100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Tier 3	12.1 - 25 hcf	115%	0.0%	-23.0%	-34.5%	-46.0%	-57.5%
Tier 4	Over 25 hcf	140%	0.0%	-28.0%	-42.0%	-56.0%	-70.0%
Multi-Famil	y Residential						
Tier 1	0 - 5 hcf	75%	0.0%	-15.0%	-22.5%	-30.0%	-37.5%
Tier 2	Over 5 hcf	140%	0.0%	-28.0%	-42.0%	-56.0%	-70.0%
Commercia	I	100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Irrigation		100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
WATER SAL	ES WITH CURTAILM	ENT (HCF)					
Single-Fami	ly Residential		2014/15 Proj. Use				
Tier 1	0 - 6 hcf		1,576,102	1,339,690	1,221,480	1,103,270	985,060
Tier 2	6.1 - 12 hcf		1,212,322	969,860	848,630	727,390	606,160
Tier 3	12.1 - 25 hcf		1,303,811	1,003,930	854,000	704,060	554,120
Tier 4	Over 25 hcf		743,497	535,320	431,230	<u>327,140</u>	223,050
Subtotal			4,835,732	3,848,800	3,355,340	2,861,860	2,368,390
% Reduction	from Base Year		0.0%	-20.4%	-30.6%	-40.8%	-51.0%
Multi-Famil	y Residential						
Tier 1	0 - 5 hcf		2,788,700	2,370,400	2,161,240	1,952,090	1,742,940
Tier 2	Over 5 hcf		1,630,793	1,174,170	945,860	717,550	489,240
Subtotal			4,419,493	3,544,570	3,107,100	2,669,640	2,232,180
	from Base Year		0.0%	-19.8%	-12.3%	-14.1%	-16.4%
Commercia	l		2,261,449	1,809,160	1,583,010	1,356,870	1,130,720
% Reduction	from Base Year		0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Irrigation			552,720	442,180	386,900	331,630	276,360
% Reduction	from Base Year		0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Estimated T	otal Water Sales		12,069,394	9,644,710	8,432,350	7,220,000	6,007,650
% Reduction	n from Base Year		0.0%	-20.1%	-30.1%	-40.2%	-50.2%

Table 47. Scenario #2: Drought Rates - Projected Reduced Revenues Based on Reduced Consumption

	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment Target	0%	20%	30%	40%	50%
ANNUAL WATER SALES (HCF)					
Single-Family Residential	2014/15 Proj. Use				
Tier 1	1,576,102	1,339,690	1,221,480	1,103,270	985,060
Tier 2	1,212,322	969,860	848,630	727,390	606,160
Tier 3	1,303,811	1,003,930	854,000	704,060	554,120
Tier 4					i
Subtotal	743,497 4,835,732	<u>535,320</u> 3,848,800	431,230 3,355,340	<u>327,140</u> 2,861,860	<u>223,050</u> 2,368,390
Multi-Family Residential					
Tier 1	2,788,700	2,370,400	2,161,240	1,952,090	1,742,940
Tier 2	1,630,793	<u>1,174,170</u>	945,860	717,550	489,240
Subtotal	4,419,493	3,544,570	3,107,100	2,669,640	2,232,180
Commercial	2,261,449	1,809,160	1,583,010	1,356,870	1,130,720
Irrigation	552,720	442,180	386,900	331,630	276,360
Total Water Sales	12,069,394	9,644,710	8,432,350	7,220,000	6,007,650
VARIABLE RATES	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014
Single-Family Residential	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014
Tier 1	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Tier 2	\$2.63	·	\$2.63	\$2.63	
		\$2.63		·	\$2.63
Tier 3 Tier 4	\$2.98 \$3.60	\$2.98 \$3.60	\$2.98 \$3.60	\$2.98 \$3.60	\$2.98 \$3.60
	φ5.00	ψ3.00	ψ3.00	ψ5.00	ψ3.00
Multi-Family Residential					İ
Tier 1	\$2.26	\$2.26	\$2.26	\$2.26	\$2.26
Tier 2	\$3.35	\$3.35	\$3.35	\$3.35	\$3.35
Commercial	\$2.67	\$2.67	\$2.67	\$2.67	\$2.67
Irrigation	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75
REVENUES WITH CURTAILMENT					
					}
Single-Family Residential Tier 1	\$3,388,619	\$2,880,334	\$2,626,182	\$2,372,031	\$2,117,879
Tier 2			2,231,897		1,594,201
Tier 3	3,188,407	2,550,732		1,913,036 2,098,099	
	3,885,357	2,991,711	2,544,920		1,651,278
Tier 4 Subtotal	<u>2,676,589</u>	<u>1,927,152</u>	<u>1,552,428</u>	<u>1,177,704</u>	802,980
Subtotal	13,138,972	10,349,929	8,955,427	7,560,869	6,166,337
Multi-Family Residential					
Tier 1	\$6,302,462	\$5,357,104	\$4,884,402	\$4,411,723	\$3,939,044
Tier 2	<u>5,463,157</u>	3,933,470	3,168,631	2,403,793	<u>1,638,954</u>
Subtotal	11,765,619	9,290,574	8,053,033	6,815,516	5,577,998
Commercial	\$6,038,069	\$4,830,457	\$4,226,637	\$3,622,843	\$3,019,022
Irrigation	\$1,519,980	\$1,215,995	\$1,063,975	\$911,983	\$759,990
Total	\$32,462,640	\$25,686,954	\$22,299,072	\$18,911,210	\$15,523,348
Revenue Loss with Curtailment	\$0	\$6,775,685	\$10,163,568	\$13,551,429	\$16,939,291

Table 48. Scenario #2: Projected Drought Rates for 2014/15

	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment Target	0%	20%	30%	40%	50%
Water Sales Impact (hcf)					
Reduced Water Sales (hcf)	0	2,413,900	3,620,800	4,827,800	6,034,700
Water Sales with Curtailment (hcf)	12,069,394	9,655,494	8,448,594	7,241,594	6,034,694
Add'l Revenue Requirement					
Water Sales Revenue Loss	\$0	\$6,776,000	\$10,164,000	\$13,551,000	\$16,939,000
Reduced O&M	\$0	\$0	\$0	\$0	\$0
Add'l Conservation Program Costs	<u>\$0</u>	\$100,000	\$200,000	\$300,000	\$400,000
Total Add'l Revenue Requirement	\$0	\$6,876,000	\$10,364,000	\$13,851,000	\$17,339,000
DROUGHT CHARGE PER HCF		\$0.71	\$1.23	\$1.91	\$2.87

SECTION 10: RATE SCENARIO #3

Scenario #3 includes five years of rate increases (5%, 2%, 2%, 2%, 2%) through 2018/19. Based on this scenario, the water utility will continue to operate in a negative cash balance through the end of the five year period. The cash balance at the end of 2018/19 is projected at negative \$1.3 million.

Table 49. Scenario #3: 5-2-2-2 – Cash Flow Projection

	Projected			Five-Year Plan		
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Assumptions:						
Revenue Adjustment (Assumes 12 months of rate increases)		5.0%	2.0%	2.0%	2.0%	2.0%
Interest Earnings Rate	0.5%	0.3%	0.5%	0.5%	1.0%	1.0%
Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Operating Revenues - Charges for Services						
	444.547.000	446.077.000	447.552.000	440.040.000	450.074.000	454 224 222
Potable Sales Based on 12 Months of Increases	\$44,517,200	\$46,977,000	\$47,652,000	\$48,848,000	\$50,074,000	\$51,331,000
Recycled Water Sales Based on 12 Months of Increases Total Water Sales Based on 12 Months of Increases	<u>1,955,000</u>	<u>2,063,000</u> 49,040,000	<u>2,092,000</u> 49,744,000	<u>2,145,000</u> 50,993,000	<u>2,199,000</u> 52,273,000	2,254,000
Total Water Sales Based Off 12 Months of increases	46,472,200	49,040,000	49,744,000	30,993,000	32,273,000	53,585,000
Operating Revenues - Charges for Services						
Potable Sales	\$44,517,200	\$46,485,000	\$47,652,000	\$48,848,000	\$50,074,000	\$51,331,000
Recycled Sales	1,955,000	2,041,000	2,092,000	2,145,000	2,199,000	2,254,000
Fireline Credit	-	(3,400,000)	-	-	=	
Total Retail Sales	46,472,200	45,126,000	49,744,000	50,993,000	52,273,000	53,585,000
Operating Expenses						
Production	25,045,200	24,092,800	25,186,600	26,096,500	27,455,500	28,405,200
Transmission and Distribution	10,663,200	11,369,400	12,394,700	12,633,500	13,058,600	13,582,500
Customer Services	2,797,200	2,750,000	2,819,300	2,903,700	2,990,700	3,080,500
Depreciation	5,403,600	5,254,500	5,825,000	6,350,000	6,875,000	7,400,000
Total Operating Expenses	43,909,200	43,466,700	46,225,600	47,983,700	50,379,800	52,468,200
Operating Income	2,563,000	1,659,300	3,518,400	3,009,300	1,893,200	1,116,800
Non-Operating Revenues and Expenses						
Revenue from Customer Paid Projects	140,000	1,940,700	1,940,700	1,740,700	1,740,700	1,740,700
Non-Operating Income	1,541,100	1,435,000	985,000	985,000	985,000	985,000
Non-Operating Expense (Interest Expense)	(3,118,000)	(3,514,300)	(3,477,600)	(3,437,800)	(3,384,800)	(3,330,000
Total Non-operating Revenues, net	(1,436,900)	(138,600)	(551,900)	(712,100)	(659,100)	(604,300
Net Income Before Transfers	1,126,100	1,520,700	2,966,500	2,297,200	1,234,100	512,500
•		_,,	_,,,,,,,,,	_,		,
Gladys Drive Reimbursement Net Income (Loss)	1,000,000 126,100	1,520,700	2,966,500	2,297,200	1,234,100	512,500
Net income (Loss)	120,100	1,320,700	2,300,300	2,237,200	1,234,100	312,300
Beginning Unrestricted Cash Reserves	(14,186,600)	(10,218,400)	(7,450,400)	(3,384,600)	(1,853,938)	(1,421,276)
Add Non Cash Expense - Depreciation	5,403,600	5,254,500	5,825,000	6,350,000	6,875,000	7,400,000
Net Unrestricted Cash Reserves	(\$8,783,000)	(4,963,900)	(1,625,400)	2,965,400	5,021,062	5,978,724
Add Net Income	126,100	1,520,700	2,966,500	2,297,200	1,234,100	512,500
Add Bond Proceeds	-	-	-	-	-	-
Less Bond Principal Payments - 2008 Bonds	(1,210,000)	(1,245,000)	(1,285,000)	(1,325,000)	(1,370,000)	(1,420,000
Less Bond Principal Payments - 2012 Bonds	-	-	-	-	(415,000)	(435,000)
Less Capital Expenditures - Pay Go	(272,000)	(821,500)	(1,500,000)	(4,050,838)	(4,150,738)	(4,150,738
Less Capital Expenditures - Customer Paid	(79,500)	(1,940,700)	(1,940,700)	(1,740,700)	(1,740,700)	(1,740,700)
Revenues Less Expenses	(1,435,400)	(2,486,500)	(1,759,200)	(4,819,338)	(6,442,338)	(7,233,938)
Ending Unrestricted Cash Reserves	(10,218,400)	(7,450,400)	(3,384,600)	(1,853,938)	(1,421,276)	(1,255,214)
Beginning Bond Proceeds	28,525,100	21,014,082	5,554,874	-	-	-
Bonds Proceeds	-	-	-	-	-	-
Less Capital Expenditures - Bonds	(7,511,018)	(15,459,208)	(5,554,874)	-	-	-
Ending Bond Proceeds	21,014,082	5,554,874	-	-	-	-
Debt Service Coverage - Min. 1.25	2.20	1.75	2.17	2.17	1.89	1.83
Debt Service Coverage Met	yes	yes	yes	yes	yes	yes
Misimum Carlo Rasson Tarant	44.000.000	44 200 000	44 202 202	44 200 000	44 200 000	44.222.55
Minimum Cash Reserve Target Cash Reserve Target Met	11,300,000	11,300,000	11,300,000	11,300,000	11,300,000	11,300,000
custi neserve rurget iviet	no	no	no	no	no	no

¹ - Revenues for 2014/15 have been adjusted for September 1, 2014 effective date.

Scenario #3: Proposed Rates

The following tables shows a 5-year schedule of proposed water rates for Scenario #3 incorporating a) the overall level of required rate increases to fund GWP's costs of providing service, b) the proposed rate structure adjustments, and c) the revenue recovery allocations that fairly apportion costs to all customers. The first rate adjustment will be effective September 1, 2014. Rate increases thereafter will be effective on July 1 of each year.

Table 50. Scenario #3: Proposed Potable Water Rates

МО	MONTHLY WATER CUSTOMER CHARGES									
	Current	Projected								
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19				
5/8"	\$21.18	\$20.80	\$20.99	\$21.41	\$21.84	\$22.27				
3/4"	\$24.83	\$26.39	\$26.64	\$27.16	\$27.71	\$28.26				
1.0"	\$32.15	\$34.78	\$35.10	\$35.80	\$36.52	\$37.24				
1.5"	\$50.43	\$57.15	\$57.68	\$58.82	\$60.01	\$61.20				
2.0"	\$72.38	\$68.33	\$68.97	\$70.33	\$71.75	\$73.17				
3.0"	\$123.58	\$236.09	\$238.29	\$243.01	\$247.91	\$252.81				
4.0"	\$196.72	\$459.77	\$464.05	\$473.25	\$482.79	\$492.33				
6.0"	\$379.59	\$851.21	\$859.13	\$876.17	\$893.83	\$911.49				
8.0"	\$599.02	\$1,969.61	\$1,987.93	\$2,027.37	\$2,068.23	\$2,109.09				
10.0"	\$855.03	\$3,088.01	\$3,116.73	\$3,178.57	\$3,242.63	\$3,306.69				
12.0"	-	\$3,088.01	\$3,116.73	\$3,178.57	\$3,242.63	\$3,306.69				

DAILY WATER CU	JSTOMER CH	ARGES (MON	THLY CHARG	E/30 DAYS)		
	Current	Projected				
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$0.71	\$0.69	\$0.70	\$0.71	\$0.73	\$0.74
3/4"	\$0.83	\$0.88	\$0.89	\$0.91	\$0.92	\$0.94
1.0"	\$1.07	\$1.16	\$1.17	\$1.19	\$1.22	\$1.24
1.5"	\$1.68	\$1.91	\$1.92	\$1.96	\$2.00	\$2.04
2.0"	\$2.41	\$2.28	\$2.30	\$2.34	\$2.39	\$2.44
3.0"	\$4.12	\$7.87	\$7.94	\$8.10	\$8.26	\$8.43
4.0"	\$6.56	\$15.33	\$15.47	\$15.78	\$16.09	\$16.41
6.0"	\$12.65	\$28.37	\$28.64	\$29.21	\$29.79	\$30.38
8.0"	\$19.97	\$65.65	\$66.26	\$67.58	\$68.94	\$70.30
10.0"	\$28.50	\$102.93	\$103.89	\$105.95	\$108.09	\$110.22
12.0"	-	\$102.93	\$103.89	\$105.95	\$108.09	\$110.22

	MONTHLY VARIABLE CHARGES - DOES NOT INCLUDE WATER ADJUSTMENT CHARGES										
			SINGLE FAM	ILY RESIDENT	TAL						
	Current	Proposed	Current	t Projected							
	Monthly Tiers	Monthly Tiers	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19			
Tier 1	0 - 6.26 hcf	0 - 6 hcf	\$1.72	\$2.31	\$2.32	\$2.36	\$2.40	\$2.42			
Tier 2	6.27 - 12.52 hcf	6.1 - 12 hcf	\$2.18	\$2.84	\$2.85	\$2.93	\$2.97	\$2.99			
Tier 3	12.53 - 31.03 hcf	12.1 - 25 hcf	\$3.18	\$3.22	\$3.23	\$3.34	\$3.38	\$3.40			
Tier 4	31.04 - 40.28 hcf	Over 25 hcf	\$3.54	\$3.90	\$3.91	\$4.08	\$4.12	\$4.14			
Tier 5	Over 40.28 hcf		\$4.13	-	-	-	-	-			

	MULTI- FAMILY RESIDENTIAL									
	Current	Proposed	Current (1)	Projected						
	Monthly Tiers	Monthly Tiers	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
Tier 1	0 - 5.10 hcf	0 - 5 hcf	\$1.81	\$2.42	\$2.43	\$2.47	\$2.51	\$2.54		
Tier 2	5.11 - 10.20 hcf	Over 5 hcf	\$3.03	\$3.56	\$3.57	\$3.66	\$3.70	\$3.78		
Tier 3	Over 10.20 hcf		\$3.60	-	-	-	-	-		

COMMERCIAL							
	Current						
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19	
All Consumption per hcf	\$2.87	\$2.86	\$2.88	\$2.92	\$2.97	\$3.01	

IRRIGATION							
	Current	Projected					
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19	
All Consumption per hcf	\$3.08	\$2.95	\$2.97	\$3.02	\$3.08	\$3.12	

 $^{1 -} The \ tier \ breakpoints \ for \ multi-family \ customers \ are \ prorated \ based \ on \ the \ number \ of \ dwelling \ units \ for \ each \ account.$

Table 51. Scenario #3: Proposed Recycled Water Rates

	MONTHLY RECY	CLED WATER	CUSTOMER C	HARGE				
	Current	Projected						
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
5/8"	\$15.89	\$17.68	\$17.84	\$18.20	\$18.56	\$18.93		
3/4"	\$18.62	\$22.43	\$22.64	\$23.09	\$23.55	\$24.02		
1.0"	\$24.11	\$29.56	\$29.84	\$30.43	\$31.04	\$31.65		
1.5"	\$37.82	\$48.58	\$49.03	\$50.00	\$51.01	\$52.02		
2.0"	\$54.29	\$58.08	\$58.62	\$59.78	\$60.99	\$62.19		
3.0"	\$92.69	\$200.68	\$202.55	\$206.56	\$210.72	\$214.89		
4.0"	\$147.54	\$390.80	\$394.44	\$402.26	\$410.37	\$418.48		
6.0"	\$284.69	\$723.53	\$730.26	\$744.74	\$759.76	\$774.77		
8.0"	\$449.27	\$1,674.17	\$1,689.74	\$1,723.26	\$1,758.00	\$1,792.73		
10.0"	\$641.27	\$2,624.81	\$2,649.22	\$2,701.78	\$2,756.24	\$2,810.69		
12.0"	-	\$2,624.81	\$2,649.22	\$2,701.78	\$2,756.24	\$2,810.69		

	DAILY RECYCLED WATER CUS	TOMER CHARG	E (MONTHLY C	HARGE/30 DA	YS)						
	Current	Projected									
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19					
5/8"	\$0.53	\$0.59	\$0.59	\$0.61	\$0.62	\$0.63					
3/4"	\$0.62	\$0.75	\$0.75	\$0.77	\$0.79	\$0.80					
1.0"	\$0.80	\$0.99	\$0.99	\$1.01	\$1.03	\$1.06					
1.5"	\$1.26	\$1.62	\$1.63	\$1.67	\$1.70	\$1.73					
2.0"	\$1.81	\$1.94	\$1.95	\$1.99	\$2.03	\$2.07					
3.0"	\$3.09	\$6.69	\$6.75	\$6.89	\$7.02	\$7.16					
4.0"	\$4.92	\$13.03	\$13.15	\$13.41	\$13.68	\$13.95					
6.0"	\$9.49	\$24.12	\$24.34	\$24.82	\$25.33	\$25.83					
8.0"	\$14.98	\$55.81	\$56.32	\$57.44	\$58.60	\$59.76					
10.0"	\$21.38	\$87.49	\$88.31	\$90.06	\$91.87	\$93.69					
12.0"	-	\$87.49	\$88.31	\$90.06	\$91.87	\$93.69					

MONTHLY RECYCLED WATER VARIABLE CHARGES											
COMMERCIAL RECYCLED WATER RATE											
	Current			Projected							
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19					
Water Variable Charge	\$2.1500	\$2.43	\$2.45	\$2.48	\$2.52	\$2.56					

IRRIGATION RECYCLED WATER RATE											
	Current	Projected									
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19					
Water Variable Charge	\$2.3100	\$2.51	\$2.52	\$2.57	\$2.62	\$2.65					

^{1 -} Beginning in 2014/15, the recycled water customer charge and variable rates will be based on a 15% discount from the potable rates.

Table 52. Scenario #3: Proposed Private Fire Line Rates (1)

	MC	ONTHLY PRIVATE FIRE LINE	CUSTOMER	CHARGE						
	Current		Projected							
Fire Line Service Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19				
1" (2)	-	\$8.10	\$8.18	\$8.34	\$8.51	\$8.68				
1-1/2" (2)	-	\$8.96	\$9.05	\$9.23	\$9.42	\$9.61				
2.0"	\$13.4725	\$10.44	\$10.57	\$10.78	\$11.00	\$11.22				
3.0"	\$28.1415	\$15.74	\$15.99	\$16.32	\$16.66	\$17.00				
4.0"	\$202.37	\$24.89	\$25.35	\$25.88	\$26.42	\$26.97				
6.0"	\$395.98	\$57.74	\$58.92	\$60.19	\$61.46	\$62.73				
8.0"	\$633.96	\$114.39	\$116.84	\$119.36	\$121.89	\$124.42				
10.0"	\$917.86	\$199.61	\$203.95	\$208.36	\$212.79	\$217.21				
12.0" (2)	-	\$317.72	\$324.68	\$331.72	\$338.77	\$345.82				

D	AILY PRIVATE	FIRE LINE WATER CUSTOMER	CHARGE (MON	THLY CHARGE	/30 DAYS)	
	Current			Projected		
Fire Line Service Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
1" (2)	-	\$0.27	\$0.27	\$0.28	\$0.28	\$0.29
1-1/2" (2)	-	\$0.30	\$0.30	\$0.31	\$0.31	\$0.32
2.0"	\$0.45	\$0.35	\$0.35	\$0.36	\$0.37	\$0.37
3.0"	\$0.94	\$0.52	\$0.53	\$0.54	\$0.56	\$0.57
4.0"	\$6.75	\$0.83	\$0.85	\$0.86	\$0.88	\$0.90
6.0"	\$13.20	\$1.92	\$1.96	\$2.01	\$2.05	\$2.09
8.0"	\$21.13	\$3.81	\$3.89	\$3.98	\$4.06	\$4.15
10.0"	\$30.60	\$6.65	\$6.80	\$6.95	\$7.09	\$7.24
12.0" (2)	-	\$10.59	\$10.82	\$11.06	\$11.29	\$11.53

	MONTHLY PRIVATE FIRE VARIABLE CHARGES											
Current Tiers	Jan 1, 2014	Tiers (3)	2014/15	2015/16	2016/17	2017/18	2018/19					
0 - 10 hcf	\$0.9204	All Use	\$2.86	\$2.88	\$2.92	\$2.97	\$3.01					
Over 10 hcf	\$2.0709											

 $[\]bf 1$ - Private fire line rates for 4" service and larger were suspended in January 2014.

^{2 -} Currently has no rate

³ - Beginning in 2014/15, the variable charge for private fire lines will be equal to the potable commercial rate.

Scenario #3: Water Bill Impacts

The following tables show sample bill impacts for a selection of customer profiles for Scenario #3. The proposed revenue adjustments do not imply that each customer will receive the same percentage increase in their bill. The bill impacts will vary for each customer as a result of the proposed fixed meter charge adjustments, the proposed variable rate structure changes, and each individual customer's actual consumption levels. Note that water consumption, particularly for single family customers, typically varies from month to month due to seasonal variations in weather and/or other factors. Hence customers could face a range of impacts throughout the year depending on their level of water use in each billing period.

The sample bill impacts do not include any future WAC increases. The WAC is calculated twice a year and recovers any additional costs of water purchases and energy costs that exceed the annual budget. The WAC can either increase or decrease semi-annually and is based on the cost of purchased water from MWD and the cost of purchased energy for the previous 6 months.

Table 53. Scenario #3: Sample Single Family Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				SINGLE FAMIL	Y RESIDENTIA	L				
3/4" METER, 10 CCF/MON	TH									
Fixed Charge	<u>Use</u>	\$15.66	\$21.97	\$23.01	\$24.83	\$26.39	\$26.64	\$27.16	\$27.71	\$28.26
Variable Charge	10			4			4			4
Tier 1		\$8.40	\$9.53	\$9.97	\$10.78	\$13.86	\$13.92	\$14.16	\$14.40	\$14.52
Tier 2		-	\$7.05	\$7.46	\$8.13	\$11.36	\$11.40	\$11.72	\$11.88	\$11.96
Tier 3		-	-	-	-	-	-	-	-	-
Tier 4 Tier 5		-	-	-	-	-	-	-	-	_
Subtotal Variable Charge		\$8.40	\$16.58	\$17.43	\$18.92	\$25.22	\$25.32	<u>-</u> \$25.88	\$26.28	\$26.48
	40									
WAC Charge*	<u>10</u>	\$12.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$36.41	\$38.55	\$40.44	\$43.75	\$51.61	\$51.96	\$53.04	\$53.99	\$54.74
\$ Change			\$2.14	\$1.89	\$3.31	\$7.86	\$0.35	\$1.08	\$0.95	\$0.75
Percent Change			6%	5%	8%	18%	1%	2%	2%	1%
3/4" METER, 19 CCF/MON	тн									
Fixed Charge Variable Charge	<u>Use</u> 19	\$15.66	\$21.97	\$23.01	\$24.83	\$26.39	\$26.64	\$27.16	\$27.71	\$28.26
Tier 1		\$8.40	\$9.53	\$9.97	\$10.78	\$13.86	\$13.92	\$14.16	\$14.40	\$14.52
Tier 2		\$16.26	\$11.85	\$12.54	\$13.67	\$17.04	\$17.10	\$17.58	\$17.82	\$17.94
Tier 3		-	\$19.54	\$19.93	\$20.57	\$22.54	\$22.61	\$23.38	\$23.66	\$23.80
Tier 4		-	-	-	-	-	-	-	-	-
Tier 5		_ =	_ =	_ =	. =	_ =	_ =	_ =	_ =	_ =
Subtotal Variable Charge		\$24.66	\$40.92	\$42.44	\$45.03	\$53.44	\$53.63	\$55.12	\$55.88	\$56.26
WAC Charge*	<u>19</u>	\$23.46	\$0.71	\$1.36	\$2.26	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$63.78	\$63.60	\$66.81	\$72.12	\$79.83	\$80.27	\$82.28	\$83.59	\$84.52
\$ Change			(\$0.17)	\$3.20	\$5.32	\$7.71	\$0.44	\$2.01	\$1.31	\$0.93
Percent Change			0%	5%	8%	11%	1%	3%	2%	1%
3/4" METER, 50 CCF/MON	тн									
Fixed Charge	Use	\$15.66	\$21.97	\$23.01	\$24.83	\$26.39	\$26.64	\$27.16	\$27.71	\$28.26
Variable Charge	50									
Tier 1		\$8.40	\$9.53	\$9.97	\$10.78	\$13.86	\$13.92	\$14.16	\$14.40	\$14.52
Tier 2		\$72.25	\$11.85	\$12.54	\$13.67	\$17.04	\$17.10	\$17.58	\$17.82	\$17.94
Tier 3		-	\$55.90	\$57.01	\$58.86	\$41.86	\$41.99	\$43.42	\$43.94	\$44.20
Tier 4		-	\$30.99	\$31.54	\$32.75	\$97.50	\$97.75	\$102.00	\$103.00	\$103.50
Tier 5		=	\$37.38	\$38.35	\$40.10	<u>=</u>	=	=	=	<u>=</u>
Subtotal Variable Charge	50	\$80.65	\$145.65	\$149.42	\$156.16	\$170.26	\$170.76	\$177.16	\$179.16	\$180.16
WAC Charge*	<u>50</u>	\$61.74	\$4.31	\$8.44	\$13.88	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$158.05	\$171.93	\$180.87	\$194.87	\$196.65	\$197.40	\$204.32	\$206.87	\$208.42
\$ Change			\$13.89	\$8.93	\$14.00	\$1.78	\$0.75	\$6.92	\$2.55	\$1.55
Percent Change			9%	5%	8%	1%	0%	4%	1%	1%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 54. Scenario #3: Sample Multi-Family Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				MULTI-FAMII	Y RESIDENTIA	\L				
1" METER, 5 UNITS, 50 CCI	F/MONTH	<u> </u>								
Fixed Charge	<u>Use</u>	\$15.66	\$28.46	\$29.79	\$32.15	\$34.78	\$35.10	\$35.80	\$36.52	\$37.24
Variable Charge	50	4								
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$60.50	\$60.75	\$61.75	\$62.75	\$63.50
Tier 2		\$72.25	\$71.39	\$72.37	\$74.08	\$89.00	\$89.25	\$91.50	\$92.50	\$94.50
Tier 3		<u>-</u>	<u>-</u>	<u>-</u>	ć120.22	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Subtotal Variable Charge		\$80.65	\$112.53	\$115.55	\$120.33	\$149.50	\$150.00	\$153.25	\$155.25	\$158.00
WAC Charge*	<u>50</u>	\$61.74	\$2.94	\$5.88	\$9.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$158.05	\$143.93	\$151.22	\$162.03	\$184.28	\$185.10	\$189.05	\$191.77	\$195.24
\$ Change			(\$14.12)	\$7.29	\$10.81	\$22.25	\$0.82	\$3.95	\$2.72	\$3.47
Percent Change			-9%	5%	7%	14%	0%	2%	1%	2%
1" METER, 5 UNITS, 70 CCI	F/MONTH									
Fixed Charge	Use	\$15.66	\$28.46	\$29.79	\$32.15	\$34.78	\$35.10	\$35.80	\$36.52	\$37.24
Variable Charge	70									
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$60.50	\$60.75	\$61.75	\$62.75	\$63.50
Tier 2		\$108.38	\$74.61	\$75.63	\$77.42	\$160.20	\$160.65	\$164.70	\$166.50	\$170.10
Tier 3		=	<u>\$64.81</u>	\$66.14	<u>\$68.22</u>	=	=	=	=	=
Subtotal Variable Charge		\$116.78	\$180.55	\$184.94	\$191.88	\$220.70	\$221.40	\$226.45	\$229.25	\$233.60
WAC Charge*	70	\$86.44	\$5.33	\$10.67	\$17.34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$218.87	\$214.34	\$225.40	\$241.37	\$255.48	\$256.50	\$262.25	\$265.77	\$270.84
\$ Change			(\$4.53)	\$11.06	\$15.97	\$14.11	\$1.02	\$5.75	\$3.52	\$5.07
Percent Change			-2%	5%	7%	6%	0%	2%	1%	2%
1" METER, 5 UNITS, 100 CO	CE/MONT	<u> </u>								
Fixed Charge	Use	\$15.66	\$28.46	\$29.79	\$32.15	\$34.78	\$35.10	\$35.80	\$36.52	\$37.24
Variable Charge	100	V15.00	Ų20.10	Ų23.73	Ų32.13	ψ5 σ	ψ55.120	ψ33.00	Ų30.3 <u>2</u>	ψ37.12.1
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$60.50	\$60.75	\$61.75	\$62.75	\$63.50
Tier 2		\$162.57	\$74.61	\$75.63	\$77.42	\$267.00	\$267.75	\$274.50	\$277.50	\$283.50
Tier 3		_	\$167.41	\$170.84	\$176.22	-	-	-	-	-
Subtotal Variable Charge		\$170.97	\$283.15	\$289.64	\$299.88	\$327.50	\$328.50	\$336.25	\$340.25	\$347.00
WAC Charge*	100	\$123.48	\$8.93	\$17.87	\$29.04	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$310.10	\$320.54	\$337.30	\$361.07	\$362.28	\$363.60	\$372.05	\$376.77	\$384.24
\$ Change			\$10.44	\$16.76	\$23.77	\$1.21	\$1.32	\$8.45	\$4.72	\$7.47
Percent Change			3%	5%	7%	. 0%	0%	2%	1%	2%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 55. Scenario #3: Sample Commercial Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				COM	/IERCIAL					
2" METER, 30 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 30	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$68.97	\$70.33	\$71.75	\$73.17
Tier 1		\$8.40								
Tier 2		<u>\$36.13</u>								
Subtotal Variable Charge		\$44.53	\$80.40	\$82.50	\$86.10	\$85.80	\$86.40	\$87.60	\$89.10	\$90.30
WAC Charge*	30	\$37.04	\$2.10	\$4.20	\$6.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$126.27	\$146.65	\$153.81	\$165.38	\$154.13	\$155.37	\$157.93	\$160.85	\$163.47
\$ Change			\$20.38	\$7.16	\$11.57	(\$11.25)	\$1.24	\$2.56	\$2.92	\$2.62
Percent Change			16%	5%	8%	-7%	1%	2%	2%	2%
2" METER, 100 CCF/MONTH	ı									
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$68.97	\$70.33	\$71.75	\$73.17
Variable Charge	100									
Tier 1		\$8.40								
Tier 2		<u>\$162.57</u>								
Subtotal Variable Charge		\$170.97	\$268.00	\$275.00	\$287.00	\$286.00	\$288.00	\$292.00	\$297.00	\$301.00
WAC Charge*	100	\$123.48	\$7.00	\$14.00	\$23.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$339.14	\$339.15	\$356.11	\$382.38	\$354.33	\$356.97	\$362.33	\$368.75	\$374.17
\$ Change			\$0.01	\$16.96	\$26.27	(\$28.05)	\$2.64	\$5.36	\$6.42	\$5.42
Percent Change			0%	5%	7%	-7%	1%	2%	2%	1%
2" METER, 300 CCF/MONTH	ı									
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$68.97	\$70.33	\$71.75	\$73.17
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		<u>\$523.83</u>								
Subtotal Variable Charge		\$532.23	\$804.00	\$825.00	\$861.00	\$858.00	\$864.00	\$876.00	\$891.00	\$903.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$947.36	\$889.15	\$934.11	\$1,002.38	\$926.33	\$932.97	\$946.33	\$962.75	\$976.17
\$ Change			(\$58.21)	\$44.96	\$68.27	(\$76.05)	\$6.64	\$13.36	\$16.42	\$13.42
Percent Change			-6%	5%	7%	-8%	1%	1%	2%	1%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 56. Scenario #3: Sample Commercial with Fire Line Bill Impacts*

			Actual		Current	·					
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19	
				COMMERCIAL	WITH FIRE LI	NE					
2" METER, 30 CCF/MONTH,	4" FIRE	ĻINE									
Fixed Charge	<u>Use</u>	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$68.97	\$70.33	\$71.75	\$73.17	
Variable Charge	30										
Tier 1		\$8.40									
Tier 2		\$36.13									
Subtotal Variable Charge		\$44.53	\$80.40	\$82.50	\$86.10	\$85.80	\$86.40	\$87.60	\$89.10	\$90.30	
WAC Charge*	<u>30</u>	\$37.04	\$2.10	\$4.20	\$6.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$24.89	\$25.35	\$25.88	\$26.42	\$26.97	
Total Monthly Water Bill		\$165.35	\$263.38	\$341.46	\$367.75	\$179.02	\$180.72	\$183.81	\$187.27	\$190.44	
\$ Change			\$98.03	\$78.08	\$26.29	(\$188.73)	\$1.70	\$3.09	\$3.46	\$3.17	
Percent Change			59%	30%	8%	-51%	1%	2%	2%	2%	
2" METER, 100 CCF/MONTH	. 4" FIRE	FLINE									
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$68.97	\$70.33	\$71.75	\$73.17	
Variable Charge	100		•	•			•			·	
Tier 1		\$8.40									
Tier 2		\$162.57									
Subtotal Variable Charge		\$170.97	\$268.00	\$275.00	\$287.00	\$286.00	\$288.00	\$292.00	\$297.00	\$301.00	
WAC Charge*	<u>100</u>	\$123.48	\$7.00	\$14.00	\$23.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$24.89	\$25.35	\$25.88	\$26.42	\$26.97	
Total Monthly Water Bill		\$378.23	\$455.88	\$543.76	\$584.75	\$379.22	\$382.32	\$388.21	\$395.17	\$401.14	
\$ Change			\$77.65	\$87.88	\$40.99	(\$205.53)	\$3.10	\$5.89	\$6.96	\$5.97	
Percent Change			21%	19%	8%	-35%	1%	2%	2%	2%	
2" METER, 300 CCF/MONTH	. 4" FIRE	LINE									
Fixed Charge	<u>Use</u>	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$68.97	\$70.33	\$71.75	\$73.17	
Variable Charge	300										
Tier 1		\$8.40									
Tier 2		\$523.83									
Subtotal Variable Charge		\$532.23	\$804.00	\$825.00	\$861.00	\$858.00	\$864.00	\$876.00	\$891.00	\$903.00	
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$24.89	\$25.35	\$25.88	\$26.42	\$26.97	
Total Monthly Water Bill		\$986.45	\$1,005.88	\$1,121.76	\$1,204.75	\$951.22	\$958.32	\$972.21	\$989.17	\$1,003.14	
\$ Change			\$19.43	\$115.88	\$82.99	(\$253.53)	\$7.10	\$13.89	\$16.96	\$13.97	
Percent Change			2%	12%	7%	-21%	1%	1%	2%	1%	

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 57. Scenario #3: Sample Irrigation Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				IRRIG	ATION					
2" METER, 150 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 150	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$68.97	\$70.33	\$71.75	\$73.17
Tier 1		\$8.40								
Tier 2		\$252.88								
Subtotal Variable Charge		\$261.28	\$430.50	\$442.50	\$462.00	\$442.50	\$445.50	\$453.00	\$462.00	\$468.00
WAC Charge*	150	\$185.22	\$10.50	\$21.00	\$34.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$491.20	\$505.15	\$530.61	\$568.88	\$510.83	\$514.47	\$523.33	\$533.75	\$541.17
\$ Change			\$13.95	\$25.46	\$38.27	(\$58.05)	\$3.64	\$8.86	\$10.42	\$7.42
Percent Change			3%	5%	7%	-10%	1%	2%	2%	1%
2" METER, 300 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$68.97	\$70.33	\$71.75	\$73.17
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		\$523.83								
Subtotal Variable Charge		\$532.23	\$861.00	\$885.00	\$924.00	\$885.00	\$891.00	\$906.00	\$924.00	\$936.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$947.36	\$946.15	\$994.11	\$1,065.38	\$953.33	\$959.97	\$976.33	\$995.75	\$1,009.17
\$ Change			(\$1.21)	\$47.96	\$71.27	(\$112.05)	\$6.64	\$16.36	\$19.42	\$13.42
Percent Change			0%	5%	7%	-11%	1%	2%	2%	1%
2" METER, 500 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$68.97	\$70.33	\$71.75	\$73.17
Variable Charge	500									
Tier 1		\$8.40								
Tier 2		\$885.09								
Subtotal Variable Charge		\$893.49	\$1,435.00	\$1,475.00	\$1,540.00	\$1,475.00	\$1,485.00	\$1,510.00	\$1,540.00	\$1,560.00
WAC Charge*	<u>500</u>	\$617.40	\$35.00	\$70.00	\$115.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$1,555.58	\$1,534.15	\$1,612.11	\$1,727.38	\$1,543.33	\$1,553.97	\$1,580.33	\$1,611.75	\$1,633.17
\$ Change			(\$21.43)	\$77.96	\$115.27	(\$184.05)	\$10.64	\$26.36	\$31.42	\$21.42
Percent Change			-1%	5%	7%	-11%	1%	2%	2%	1%

^{*} The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Scenario #3: Proposed Drought Rates

In response to the governor's declaration of a State water emergency and in anticipation of possible mandatory reductions, BWA developed drought rates based on the proposed potable and recycled rates developed in this study. The drought rates could be implemented during mandatory restriction declarations by the City Council. Using 2014/15 estimated total consumption as the base year, the proposed draft rates are based on four stages of curtailment, ranging from 20 to 50 percent of overall reduction. The draft rate is a charge per hcf for all water consumption. Tables 58 through 60 calculate the drought rates under Scenario #3.

Table 58. Scenario #3: Drought Rates - Projected Reduced Consumption Based on 2014/15 Consumption

		% of Curtailment Target	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment	t Target		0%	20%	30%	40%	50%
CURTAILME	ENT BY TIER						
Single-Fami	ily Residential						
Tier 1	0 - 6 hcf	75%	0.0%	-15.0%	-22.5%	-30.0%	-37.5%
Tier 2	6.1 - 12 hcf	100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Tier 3	12.1 - 25 hcf	115%	0.0%	-23.0%	-34.5%	-46.0%	-57.5%
Tier 4	Over 25 hcf	140%	0.0%	-28.0%	-42.0%	-56.0%	-70.0%
Multi-Famil	y Residential						
Tier 1	0 - 5 hcf	75%	0.0%	-15.0%	-22.5%	-30.0%	-37.5%
Tier 2	Over 5 hcf	140%	0.0%	-28.0%	-42.0%	-56.0%	-70.0%
Commercia	I	100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Irrigation		100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
WATER SAL	ES WITH CURTAILM	ENT (HCF)					
Single-Fami	ily Residential		2014/15 Proj. Use				
Tier 1	0 - 6 hcf		1,569,829	1,334,350	1,216,620	1,098,880	981,140
Tier 2	6.1 - 12 hcf		1,202,672	962,140	841,870	721,600	601,340
Tier 3	12.1 - 25 hcf		1,283,054	987,950	840,400	692,850	545,300
Tier 4	Over 25 hcf		731,661	526,800	424,360	321,930	219,500
Subtotal			4,787,216	3,811,240	3,323,250	2,835,260	2,347,280
% Reduction	n from Base Year		0.0%	-20.4%	-30.6%	-40.8%	-51.0%
Multi-Famil	y Residential						
Tier 1	0 - 5 hcf		2,777,601	2,360,960	2,152,640	1,944,320	1,736,000
Tier 2	Over 5 hcf		1,611,321	1,160,150	934,570	708,980	483,400
Subtotal			4,388,922	3,521,110	3,087,210	2,653,300	2,219,400
	n from Base Year		0.0%	-19.8%	-12.3%	-14.1%	-16.4%
Commercia	ı		2,243,447	1,794,760	1,570,410	1,346,070	1,121,720
	n from Base Year		0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Irrigation			543,876	435,100	380,710	326,330	271,940
Ŭ	n from Base Year		0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Estimated 1	otal Water Sales		11,963,461	9,562,210	8,361,580	7,160,960	5,960,340
% Reduction	n from Base Year		0.0%	-20.1%	-30.1%	-40.1%	-50.2%

Table 59. Scenario #3: Drought Rates - Projected Reduced Revenues Based on Reduced Consumption

	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment Target	0%	20%	30%	40%	50%
ANNUAL WATER SALES (HCF)					
Single-Family Residential	2014/15 Proj. Use				
Tier 1	1,569,829	1,334,350	1,216,620	1,098,880	981,140
Tier 2	1,202,672	962,140	841,870	721,600	601,340
Tier 3	1,283,054	987,950	840,400	692,850	545,300
Tier 4	731,661	526,800	424,360	321,930	219,500
Subtotal	4,787,216	3,811,240	3,323,250	2,835,260	2,347,280
Multi-Family Residential					
Tier 1	2,777,601	2,360,960	2,152,640	1,944,320	1,736,000
Tier 2	1,611,321	1,160,150	934,570	708,980	483,400
Subtotal		-	-		
Subtotal	4,388,922	3,521,110	3,087,210	2,653,300	2,219,400
Commercial	2,243,447	1,794,760	1,570,410	1,346,070	1,121,720
Irrigation	543,876	435,100	380,710	326,330	271,940
Total Water Sales	11,963,461	9,562,210	8,361,580	7,160,960	5,960,340
VARIABLE RATES	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014
Single-Family Residential	Jul 2, 201 .	30. 1, 201	30. 1, 201 .	va. 1, 201 .	70. 1, 201 .
Tier 1	\$2.31	\$2.31	\$2.31	\$2.31	\$2.31
Tier 2	\$2.84	\$2.84	\$2.84	\$2.84	\$2.84
Tier 3	\$3.22	·	\$3.22	\$3.22	
Tier 4	\$3.22	\$3.22 \$3.90	\$3.22 \$3.90	\$3.22 \$3.90	\$3.22 \$3.90
Hei 4	\$3.90	\$3.90	\$5.50	\$3.50	\$3.50
Multi-Family Residential					
	¢2.42	ć2.42	ć2.42	ć2.42	ć2.42
Tier 1	\$2.42	\$2.42	\$2.42	\$2.42	\$2.42
Tier 2	\$3.56	\$3.56	\$3.56	\$3.56	\$3.56
Commercial	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86
Irrigation	\$2.95	\$2.95	\$2.95	\$2.95	\$2.95
REVENUES WITH CURTAILMENT					
Single-Family Residential					
Tier 1	\$3,626,305	\$3,082,349	\$2,810,392	\$2,538,413	\$2,266,433
Tier 2	3,415,588	2,732,478	2,390,911	2,049,344	1,707,806
Tier 3	4,131,434	3,181,199	2,706,088	2,230,977	1,755,866
Tier 4	2,853,478	2,054,520	1,655,004	1,255,527	856,050
Subtotal	14,026,805	11,050,545	9,562,395	8,074,261	6,586,155
Multi-Family Residential					
Tier 1	\$6,721,794	\$5,713,523	\$5,209,389	\$4,705,254	\$4,201,120
Tier 2	5,736,303	4,130,134	3,327,069	2,523,969	1,720,904
Subtotal	12,458,097	9,843,657	8,536,458	7,229,223	5,922,024
Commercial	\$6,416,258	\$5,133,014	\$4,491,373	\$3,849,760	\$3,208,119
Irrigation	\$1,604,434	\$1,283,545	\$1,123,095	\$962,674	\$802,223
Total	\$34,505,595	\$27,310,761	\$23,713,320	\$20,115,918	\$16,518,521
Revenue Loss with Curtailment	\$0	\$7,194,834	\$10,792,275	\$14,389,677	\$17,987,074

Table 60. Scenario #3: Projected Drought Rates for 2014/15

	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment Target	0%	20%	30%	40%	50%
Water Sales Impact (hcf)					
Reduced Water Sales (hcf)	0	2,392,700	3,589,000	4,785,400	5,981,700
Water Sales with Curtailment (hcf)	11,963,461	9,570,761	8,374,461	7,178,061	5,981,761
Add'l Revenue Requirement					
Water Sales Revenue Loss	\$0	\$7,195,000	\$10,792,000	\$14,390,000	\$17,987,000
Reduced O&M	\$0	\$0	\$0	\$0	\$0
Add'l Conservation Program Costs	\$0	\$100,000	\$200,000	\$300,000	\$400,000
Total Add'l Revenue Requirement	\$0	\$7,295,000	\$10,992,000	\$14,690,000	\$18,387,000
DROUGHT CHARGE PER HCF		\$0.76	\$1.31	\$2.05	\$3.07

SECTION 11: RATE SCENARIO #4

Scenario #4 includes three years of rate increases (5%, 4%, 3%) through 2016/17. Based on this scenario, the water utility will continue to operate in a negative cash balance through 2015/16. The cash balance at the end of 2018/19 is projected at approximately \$1.2 million.

Table 61. Scenario #4: 5-4-3 – Cash Flow Projection

	Projected			Five-Year Plan		
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Accumptions						
Assumptions: Revenue Adjustment (Assumes 12 months of rate increases)		5.0%	4.0%	3.0%	0.0%	0.0%
Interest Earnings Rate	0.5%	0.3%	0.5%	0.5%	1.0%	1.0%
Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Operating Revenues - Charges for Services						
Potable Sales Based on 12 Months of Increases	\$44,517,200	\$46,977,000	\$48,586,000	\$50,294,000	\$50,545,000	\$50,798,000
Recycled Water Sales Based on 12 Months of Increases	1,955,000	2,063,000	2,133,000	2,208,000	2,219,000	2,230,000
Total Water Sales Based on 12 Months of Increases	46,472,200	49,040,000	50,719,000	52,502,000	52,764,000	53,028,000
Operating Revenues - Charges for Services						
Potable Sales	\$44,517,200	\$46,485,000	\$48,586,000	\$50,294,000	\$50,545,000	\$50,798,000
Recycled Sales	1,955,000	2,041,000	2,133,000	2,208,000	2,219,000	2,230,000
Fireline Credit	-	(3,400,000)	-	-	-	-
Total Retail Sales	46,472,200	45,126,000	50,719,000	52,502,000	52,764,000	53,028,000
Operating Expenses						
Production	25,045,200	24,092,800	25,186,600	26,096,500	27,455,500	28,405,200
Transmission and Distribution	10,663,200	11,369,400	12,394,700	12,633,500	13,058,600	13,582,500
Customer Services	2,797,200	2,750,000	2,819,300	2,903,700	2,990,700	3,080,500
Depreciation	5,403,600	5,254,500	5,825,000	6,350,000	6,875,000	7,400,000
Total Operating Expenses	43,909,200	43,466,700	46,225,600	47,983,700	50,379,800	52,468,200
Operating Income	2,563,000	1,659,300	4,493,400	4,518,300	2,384,200	559,800
Non-Operating Revenues and Expenses						
Revenue from Customer Paid Projects	140,000	1,940,700	1,940,700	1,740,700	1,740,700	1,740,700
Non-Operating Income	1,541,100	1,435,000	985,000	985,000	985,000	985,000
Non-Operating Expense (Interest Expense)	(3,118,000)	(3,514,300)	(3,477,600)	(3,437,800)	(3,384,800)	(3,330,000)
Total Non-operating Revenues, net	(1,436,900)	(138,600)	(551,900)	(712,100)	(659,100)	(604,300)
Net Income Before Transfers	1,126,100	1,520,700	3,941,500	3,806,200	1,725,100	(44,500)
Gladys Drive Reimbursement	1,000,000	-	-	-	-	-
Net Income (Loss)	126,100	1,520,700	3,941,500	3,806,200	1,725,100	(44,500)
Beginning Unrestricted Cash Reserves	(14,186,600)	(10,218,400)	(7,450,400)	(2,409,600)	630,062	1,553,724
Add Non Cash Expense - Depreciation	5,403,600	5,254,500	5,825,000	6,350,000	6,875,000	7,400,000
Net Unrestricted Cash Reserves	(\$8,783,000)	(4,963,900)	(1,625,400)	3,940,400	7,505,062	8,953,724
Add Net Income	126,100	1,520,700	3,941,500	3,806,200	1,725,100	(44,500)
Add Bond Proceeds	-	-	-	-	-	-
Less Bond Principal Payments - 2008 Bonds	(1,210,000)	(1,245,000)	(1,285,000)	(1,325,000)	(1,370,000)	(1,420,000)
Less Bond Principal Payments - 2012 Bonds	- (272.000)	(004 500)	- (4.500.000)	- (4.050.000)	(415,000)	(435,000)
Less Capital Expenditures - Pay Go	(272,000)	(821,500)	(1,500,000)	(4,050,838)	(4,150,738)	(4,150,738)
Less Capital Expenditures - Customer Paid Revenues Less Expenses	(79,500) (1,435,400)	(1,940,700) (2,486,500)	(1,940,700) (784,200)	(1,740,700)	(1,740,700)	(1,740,700)
·						
Ending Unrestricted Cash Reserves	(10,218,400)	(7,450,400)	(2,409,600)	630,062	1,553,724	1,162,786
Beginning Bond Proceeds	28,525,100	21,014,082	5,554,874			
Bonds Proceeds	20,323,100			-	-	-
Less Capital Expenditures - Bonds	(7,511,018)	(15,459,208)	(5,554,874)	-	-	-
Ending Bond Proceeds	21,014,082	5,554,874	=	-	=	-
Debt Service Coverage - Min. 1.25	2.20	1.75	2.37	2.49	1.98	1.73
Debt Service Coverage Met	yes	yes	yes	yes	yes	yes
Minimum Cash Reserve Target	11,300,000	11,300,000	11,300,000	11,300,000	11,300,000	11,300,000
Cash Reserve Target Met	no	no	no	no	no	no

^{1 -} Revenues for 2014/15 have been adjusted for September 1, 2014 effective date.

Scenario #4: Proposed Rates

The following tables shows a 3-year schedule of proposed water rates for Scenario #4 incorporating a) the overall level of required rate increases to fund GWP's costs of providing service, b) the proposed rate structure adjustments, and c) the revenue recovery allocations that fairly apportion costs to all customers. The first rate adjustment will be effective September 1, 2014. Rate increases thereafter will be effective on July 1 of each year.

Table 62. Scenario #4: Proposed Potable Water Rates

МО	NTHLY WATE	R CUSTOME	R CHARGES	3		
	Current			Projected		
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$21.18	\$20.80	\$21.40	\$22.05	\$22.05	\$22.05
3/4"	\$24.83	\$26.39	\$27.15	\$27.98	\$27.98	\$27.98
1.0"	\$32.15	\$34.78	\$35.78	\$36.87	\$36.87	\$36.87
1.5"	\$50.43	\$57.15	\$58.79	\$60.58	\$60.58	\$60.58
2.0"	\$72.38	\$68.33	\$70.29	\$72.44	\$72.44	\$72.44
3.0"	\$123.58	\$236.09	\$242.85	\$250.28	\$250.28	\$250.28
4.0"	\$196.72	\$459.77	\$472.93	\$487.40	\$487.40	\$487.40
6.0"	\$379.59	\$851.21	\$875.57	\$902.36	\$902.36	\$902.36
8.0"	\$599.02	\$1,969.61	\$2,025.97	\$2,087.96	\$2,087.96	\$2,087.96
10.0"	\$855.03	\$3,088.01	\$3,176.37	\$3,273.56	\$3,273.56	\$3,273.56
12.0"	-	\$3,088.01	\$3,176.37	\$3,273.56	\$3,273.56	\$3,273.56

DAILY	WATER CUSTOMER CHA	ARGES (MONT	HLY CHARGE	/30 DAYS)		
	Current			Projected		
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$0.71	\$0.69	\$0.71	\$0.74	\$0.74	\$0.74
3/4"	\$0.83	\$0.88	\$0.91	\$0.93	\$0.93	\$0.93
1.0"	\$1.07	\$1.16	\$1.19	\$1.23	\$1.23	\$1.23
1.5"	\$1.68	\$1.91	\$1.96	\$2.02	\$2.02	\$2.02
2.0"	\$2.41	\$2.28	\$2.34	\$2.41	\$2.41	\$2.41
3.0"	\$4.12	\$7.87	\$8.10	\$8.34	\$8.34	\$8.34
4.0"	\$6.56	\$15.33	\$15.76	\$16.25	\$16.25	\$16.25
6.0"	\$12.65	\$28.37	\$29.19	\$30.08	\$30.08	\$30.08
8.0"	\$19.97	\$65.65	\$67.53	\$69.60	\$69.60	\$69.60
10.0"	\$28.50	\$102.93	\$105.88	\$109.12	\$109.12	\$109.12
12.0"	-	\$102.93	\$105.88	\$109.12	\$109.12	\$109.12

	MONTHLY VARIABLE CHARGES - DOES NOT INCLUDE WATER ADJUSTMENT CHARGES										
	SINGLE FAMILY RESIDENTIAL										
	Current	Proposed	Current			Projected					
	Monthly Tiers	Monthly Tiers	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19			
Tier 1	0 - 6.26 hcf	0 - 6 hcf	\$1.72	\$2.31	\$2.39	\$2.45	\$2.45	\$2.45			
Tier 2	6.27 - 12.52 hcf	6.1 - 12 hcf	\$2.18	\$2.84	\$2.96	\$3.02	\$3.02	\$3.02			
Tier 3	12.53 - 31.03 hcf	12.1 - 25 hcf	\$3.18	\$3.22	\$3.37	\$3.43	\$3.43	\$3.43			
Tier 4	31.04 - 40.28 hcf	Over 25 hcf	\$3.54	\$3.90	\$4.11	\$4.17	\$4.17	\$4.17			
Tier 5	Over 40.28 hcf		\$4.13	-	-	-	-	-			

	MULTI- FAMILY RESIDENTIAL									
	Current	Proposed	Current (1)			Projected				
	Monthly Tiers	Monthly Tiers	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
Tier 1	0 - 5.10 hcf	0 - 5 hcf	\$1.81	\$2.42	\$2.50	\$2.56	\$2.56	\$2.56		
Tier 2	5.11 - 10.20 hcf	Over 5 hcf	\$3.03	\$3.56	\$3.69	\$3.75	\$3.75	\$3.75		
Tier 3	Over 10.20 hcf		\$3.60	-	-	-	-	-		

COMMERCIAL								
	Current	Projected						
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
All Consumption per hcf	\$2.87	\$2.86	\$2.95	\$3.03	\$3.03	\$3.03		

IRRIGATION									
	Current	Projected							
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19			
All Consumption per hcf	\$3.08	\$2.95	\$3.05	\$3.14	\$3.14	\$3.14			

 $^{1 -} The \ tier \ breakpoints \ for \ multi-family \ customers \ are \ prorated \ based \ on \ the \ number \ of \ dwelling \ units \ for \ each \ account.$

Table 63. Scenario #4: Proposed Recycled Water Rates

	MONTHLY RECY	CLED WATER	CUSTOMER C	HARGE		
	Current			Projected		
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$15.89	\$17.68	\$18.19	\$18.74	\$18.74	\$18.74
3/4"	\$18.62	\$22.43	\$23.08	\$23.78	\$23.78	\$23.78
1.0"	\$24.11	\$29.56	\$30.41	\$31.34	\$31.34	\$31.34
1.5"	\$37.82	\$48.58	\$49.97	\$51.49	\$51.49	\$51.49
2.0"	\$54.29	\$58.08	\$59.75	\$61.57	\$61.57	\$61.57
3.0"	\$92.69	\$200.68	\$206.42	\$212.74	\$212.74	\$212.74
4.0"	\$147.54	\$390.80	\$401.99	\$414.29	\$414.29	\$414.29
6.0"	\$284.69	\$723.53	\$744.23	\$767.01	\$767.01	\$767.01
8.0"	\$449.27	\$1,674.17	\$1,722.07	\$1,774.77	\$1,774.77	\$1,774.77
10.0"	\$641.27	\$2,624.81	\$2,699.91	\$2,782.53	\$2,782.53	\$2,782.53
12.0"	-	\$2,624.81	\$2,699.91	\$2,782.53	\$2,782.53	\$2,782.53

	DAILY RECYCLED WATER CUS	TOMER CHARG	E (MONTHLY C	HARGE/30 DA	YS)			
	Current	Projected						
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
5/8"	\$0.53	\$0.59	\$0.61	\$0.62	\$0.62	\$0.62		
3/4"	\$0.62	\$0.75	\$0.77	\$0.79	\$0.79	\$0.79		
1.0"	\$0.80	\$0.99	\$1.01	\$1.04	\$1.04	\$1.04		
1.5"	\$1.26	\$1.62	\$1.67	\$1.72	\$1.72	\$1.72		
2.0"	\$1.81	\$1.94	\$1.99	\$2.05	\$2.05	\$2.05		
3.0"	\$3.09	\$6.69	\$6.88	\$7.09	\$7.09	\$7.09		
4.0"	\$4.92	\$13.03	\$13.40	\$13.81	\$13.81	\$13.81		
6.0"	\$9.49	\$24.12	\$24.81	\$25.57	\$25.57	\$25.57		
8.0"	\$14.98	\$55.81	\$57.40	\$59.16	\$59.16	\$59.16		
10.0"	\$21.38	\$87.49	\$90.00	\$92.75	\$92.75	\$92.75		
12.0"	-	\$87.49	\$90.00	\$92.75	\$92.75	\$92.75		

MONTHLY RECYCLED WATER VARIABLE CHARGES											
COMMERCIAL RECYCLED WATER RATE											
	Current			Projected							
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19					
Water Variable Charge	\$2.1500 \$2.43 \$2.51 \$2.58 \$2.58 \$2.58										

IRRIGATION RECYCLED WATER RATE												
	Current	Projected										
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19						
Water Variable Charge	\$2.3100	\$2.3100 \$2.51 \$2.59 \$2.67 \$2.67 \$2.67										

^{1 -} Beginning in 2014/15, the recycled water customer charge and variable rates will be based on a 15% discount from the potable rates.

Table 64. Scenario #4: Proposed Private Fire Line Rates (1)

	М	ONTHLY PRIVATE FIRE LINE	CUSTOMER	CHARGE							
	Current		Projected								
Fire Line Service Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19					
1" (2)	-	\$8.10	\$8.34	\$8.59	\$8.59	\$8.59					
1-1/2" (2)	-	\$8.96	\$9.23	\$9.50	\$9.50	\$9.50					
2.0"	\$13.4725	\$10.44	\$10.78	\$11.08	\$11.08	\$11.08					
3.0"	\$28.1415	\$15.74	\$16.32	\$16.74	\$16.74	\$16.74					
4.0"	\$202.37	\$24.89	\$25.88	\$26.50	\$26.50	\$26.50					
6.0"	\$395.98	\$57.74	\$60.19	\$61.54	\$61.54	\$61.54					
8.0"	\$633.96	\$114.39	\$119.36	\$121.97	\$121.97	\$121.97					
10.0"	\$917.86	\$199.61	\$208.36	\$212.87	\$212.87	\$212.87					
12.0" (2)	-	\$317.72	\$331.72	\$338.85	\$338.85	\$338.85					

D/	AILY PRIVATE	FIRE LINE WATER CUSTOMER C	CHARGE (MON	THLY CHARGE/	30 DAYS)					
	Current	t Projected								
Fire Line Service Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19				
1" (2)	-	\$0.27	\$0.28	\$0.29	\$0.29	\$0.29				
1-1/2" (2)	-	\$0.30	\$0.31	\$0.32	\$0.32	\$0.32				
2.0"	\$0.45	\$0.35	\$0.36	\$0.37	\$0.37	\$0.37				
3.0"	\$0.94	\$0.52	\$0.54	\$0.56	\$0.56	\$0.56				
4.0"	\$6.75	\$0.83	\$0.86	\$0.88	\$0.88	\$0.88				
6.0"	\$13.20	\$1.92	\$2.01	\$2.05	\$2.05	\$2.05				
8.0"	\$21.13	\$3.81	\$3.98	\$4.07	\$4.07	\$4.07				
10.0"	\$30.60	\$6.65	\$6.95	\$7.10	\$7.10	\$7.10				
12.0" (2)	-	\$10.59	\$11.06	\$11.30	\$11.30	\$11.30				

MONTHLY PRIVATE FIRE VARIABLE CHARGES											
	Current	Proposed	d Projected (3)								
Current Tiers	Jan 1, 2014	Tiers (3)	2014/15	2015/16	2016/17	2017/18	2018/19				
0 - 10 hcf	\$0.9204	All Use	\$2.86	\$2.95	\$3.03	\$3.03	\$3.03				
Over 10 hcf	\$2.0709										

 $[\]bf 1$ - Private fire line rates for 4" service and larger were suspended in January 2014.

^{2 -} Currently has no rate

³ - Beginning in 2014/15, the variable charge for private fire lines will be equal to the potable commercial rate.

Scenario #4: Water Rate Impacts

The following tables show sample bill impacts for a selection of customer profiles for Scenario #4. The proposed revenue adjustments do not imply that each customer will receive the same percentage increase in their bill. The bill impacts will vary for each customer as a result of the proposed fixed meter charge adjustments, the proposed variable rate structure changes, and each individual customer's actual consumption levels. Note that water consumption, particularly for single family customers, typically varies from month to month due to seasonal variations in weather and/or other factors. Hence customers could face a range of impacts throughout the year depending on their level of water use in each billing period.

The sample bill impacts do not include any future WAC increases. The WAC is calculated twice a year and recovers any additional costs of water purchases and energy costs that exceed the annual budget. The WAC can either increase or decrease semi-annually and is based on the cost of purchased water from MWD and the cost of purchased energy for the previous 6 months.

Table 65. Scenario #4 - Sample Single Family Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				SINGLE FAMIL	Y RESIDENTIA	L				
3/4" METER, 10 CCF/MON	TH									
Fixed Charge	<u>Use</u>	\$15.66	\$21.97	\$23.01	\$24.83	\$26.39	\$27.15	\$27.98	\$27.98	\$27.98
Variable Charge	10									
Tier 1		\$8.40	\$9.53	\$9.97	\$10.78	\$13.86	\$14.34	\$14.70	\$14.70	\$14.70
Tier 2		-	\$7.05	\$7.46	\$8.13	\$11.36	\$11.84	\$12.08	\$12.08	\$12.08
Tier 3		-	-	-	-	-	-	-	-	-
Tier 4 Tier 5		-	-	-	-	-	-	- -	-	_
Subtotal Variable Charge		\$8.40	\$16.58	\$17.43	\$18.92	\$25.22	\$26.18	\$26.78	\$26.78	\$26.78
WAC Charge*	10	\$12.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	10									
Total Monthly Water Bill		\$36.41	\$38.55	\$40.44	\$43.75	\$51.61	\$53.33	\$54.76	\$54.76	\$54.76
\$ Change			\$2.14	\$1.89	\$3.31	\$7.86	\$1.72	\$1.43	\$0.00	\$0.00
Percent Change			6%	5%	8%	18%	3%	3%	0%	0%
3/4" METER, 19 CCF/MON	тн									
Fixed Charge	<u>Use</u>	\$15.66	\$21.97	\$23.01	\$24.83	\$26.39	\$27.15	\$27.98	\$27.98	\$27.98
Variable Charge	19	60.40	ć0 F2	ć0.07	¢10.70	¢12.00	614.24	Ć14.70	¢14.70	ć14.70
Tier 1 Tier 2		\$8.40 \$16.26	\$9.53 \$11.85	\$9.97 \$12.54	\$10.78 \$13.67	\$13.86 \$17.04	\$14.34 \$17.76	\$14.70 \$18.12	\$14.70 \$18.12	\$14.70 \$18.12
Tier 3		710.20	\$19.54	\$19.93	\$20.57	\$22.54	\$23.59	\$24.01	\$24.01	\$24.01
Tier 4		_	Ç15.54 -	φ13.33 -	-	-	- -	-	-	Ş <u>2</u> 4.01
Tier 5		_	Ξ	Ξ.	_	Ξ.	Ξ	Ξ	Ξ	<u>-</u>
Subtotal Variable Charge		\$24.66	\$40.92	\$42.44	\$45.03	\$53.44	\$55.69	\$56.83	\$56.83	\$56.83
WAC Charge*	19	\$23.46	\$0.71	\$1.36	\$2.26	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill	_	\$63.78	\$63.60	\$66.81	\$72.12	\$79.83	\$82.84	\$84.81	\$84.81	\$84.81
\$ Change		,	(\$0.17)	\$3.20	\$5.32	\$7.71	\$3.01	\$1.97	\$0.00	\$0.00
Percent Change			0%	5%	8%	11%	4%	2%	0%	0%
2/4H 845T5D 50 665/84085	-									
3/4" METER, 50 CCF/MON' Fixed Charge	Use_	\$15.66	\$21.97	\$23.01	\$24.83	\$26.39	\$27.15	\$27.98	\$27.98	\$27.98
Variable Charge	50	\$15.00	321.57	\$23.01	324.63	\$20.39	327.13	327.36	327.36	\$27.50
Tier 1	50	\$8.40	\$9.53	\$9.97	\$10.78	\$13.86	\$14.34	\$14.70	\$14.70	\$14.70
Tier 2		\$72.25	\$11.85	\$12.54	\$13.67	\$17.04	\$17.76	\$18.12	\$18.12	\$18.12
Tier 3		-	\$55.90	\$57.01	\$58.86	\$41.86	\$43.81	\$44.59	\$44.59	\$44.59
Tier 4		-	\$30.99	\$31.54	\$32.75	\$97.50	\$102.75	\$104.25	\$104.25	\$104.25
Tier 5		=	\$37.38	<u>\$38.35</u>	\$40.10	Ξ.	Ξ.	=	=	=
Subtotal Variable Charge		\$80.65	\$145.65	\$149.42	\$156.16	\$170.26	\$178.66	\$181.66	\$181.66	\$181.66
WAC Charge*	<u>50</u>	\$61.74	\$4.31	\$8.44	\$13.88	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$158.05	\$171.93	\$180.87	\$194.87	\$196.65	\$205.81	\$209.64	\$209.64	\$209.64
\$ Change			\$13.89	\$8.93	\$14.00	\$1.78	\$9.16	\$3.83	\$0.00	\$0.00
Percent Change		İ	9%	5%	8%	1%	5%	2%	0%	0%

^{*} The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 66. Scenario #4 - Sample Multi-Family Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
			<u> </u>	MULTI-FAMII	LY RESIDENTIA	.L				
1" METER, 5 UNITS, 50 CCF	/MONTH	l								
Fixed Charge	<u>Use</u>	\$15.66	\$28.46	\$29.79	\$32.15	\$34.78	\$35.78	\$36.87	\$36.87	\$36.87
Variable Charge	50									
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$60.50	\$62.50	\$64.00	\$64.00	\$64.00
Tier 2		\$72.25	\$71.39	\$72.37	\$74.08	\$89.00	\$92.25	\$93.75	\$93.75	\$93.75
Tier 3		_ =	_ =	_ =	. =	. =	_ =	_ =	_ =	
Subtotal Variable Charge		\$80.65	\$112.53	\$115.55	\$120.33	\$149.50	\$154.75	\$157.75	\$157.75	\$157.75
WAC Charge*	<u>50</u>	\$61.74	\$2.94	\$5.88	\$9.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$158.05	\$143.93	\$151.22	\$162.03	\$184.28	\$190.53	\$194.62	\$194.62	\$194.62
\$ Change			(\$14.12)	\$7.29	\$10.81	\$22.25	\$6.25	\$4.09	\$0.00	\$0.00
Percent Change			-9%	5%	7%	14%	3%	2%	0%	0%
1" METER, 5 UNITS, 70 CCF	-/MONTH									
Fixed Charge	Use	\$15.66	\$28.46	\$29.79	\$32.15	\$34.78	\$35.78	\$36.87	\$36.87	\$36.87
Variable Charge	70	7-0:00	7-0	7	702.20	*******	,,,,,,,	7	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$60.50	\$62.50	\$64.00	\$64.00	\$64.00
Tier 2		\$108.38	\$74.61	\$75.63	\$77.42	\$160.20	\$166.05	\$168.75	\$168.75	\$168.75
Tier 3		=	\$64.81	\$66.14	<u>\$68.22</u>	=	Ξ.	=	Ξ.	
Subtotal Variable Charge		\$116.78	\$180.55	\$184.94	\$191.88	\$220.70	\$228.55	\$232.75	\$232.75	\$232.75
WAC Charge*	70	\$86.44	\$5.33	\$10.67	\$17.34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$218.87	\$214.34	\$225.40	\$241.37	\$255.48	\$264.33	\$269.62	\$269.62	\$269.62
\$ Change			(\$4.53)	\$11.06	\$15.97	\$14.11	\$8.85	\$5.29	\$0.00	\$0.00
Percent Change			-2%	5%	7%	6%	3%	2%	0%	0%
1" METER, 5 UNITS, 100 CO	F/MONT	Н								
Fixed Charge	Use	\$15.66	\$28.46	\$29.79	\$32.15	\$34.78	\$35.78	\$36.87	\$36.87	\$36.87
Variable Charge	100	,					• • • • • • • • • • • • • • • • • • • •	,	,	
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$60.50	\$62.50	\$64.00	\$64.00	\$64.00
Tier 2		\$162.57	\$74.61	\$75.63	\$77.42	\$267.00	\$276.75	\$281.25	\$281.25	\$281.25
Tier 3		=	\$167.41	\$170.84	<u>\$176.22</u>	-	-	-	-	
Subtotal Variable Charge		\$170.97	\$283.15	\$289.64	\$299.88	\$327.50	\$339.25	\$345.25	\$345.25	\$345.25
WAC Charge*	100	\$123.48	\$8.93	\$17.87	\$29.04	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$310.10	\$320.54	\$337.30	\$361.07	\$362.28	\$375.03	\$382.12	\$382.12	\$382.12
\$ Change			\$10.44	\$16.76	\$23.77	\$1.21	\$12.75	\$7.09	\$0.00	\$0.00
Percent Change			3%	5%	7%	0%	4%	2%	0%	0%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 67. Scenario #4 - Sample Commercial Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				COM	/IERCIAL					
2" METER, 30 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 30	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$72.44	\$72.44	\$72.44
Tier 1		\$8.40								
Tier 2		<u>\$36.13</u>								
Subtotal Variable Charge		\$44.53	\$80.40	\$82.50	\$86.10	\$85.80	\$88.50	\$90.90	\$90.90	\$90.90
WAC Charge*	30	\$37.04	\$2.10	\$4.20	\$6.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$126.27	\$146.65	\$153.81	\$165.38	\$154.13	\$158.79	\$163.34	\$163.34	\$163.34
\$ Change			\$20.38	\$7.16	\$11.57	(\$11.25)	\$4.66	\$4.55	\$0.00	\$0.00
Percent Change			16%	5%	8%	-7%	3%	3%	0%	0%
2" METER, 100 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$72.44	\$72.44	\$72.44
Variable Charge	100									
Tier 1		\$8.40								
Tier 2		\$162.57								
Subtotal Variable Charge		\$170.97	\$268.00	\$275.00	\$287.00	\$286.00	\$295.00	\$303.00	\$303.00	\$303.00
WAC Charge*	100	\$123.48	\$7.00	\$14.00	\$23.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$339.14	\$339.15	\$356.11	\$382.38	\$354.33	\$365.29	\$375.44	\$375.44	\$375.44
\$ Change			\$0.01	\$16.96	\$26.27	(\$28.05)	\$10.96	\$10.15	\$0.00	\$0.00
Percent Change			0%	5%	7%	-7%	3%	3%	0%	0%
2" METER, 300 CCF/MONTH	l									
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$72.44	\$72.44	\$72.44
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		\$523.83								
Subtotal Variable Charge		\$532.23	\$804.00	\$825.00	\$861.00	\$858.00	\$885.00	\$909.00	\$909.00	\$909.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$947.36	\$889.15	\$934.11	\$1,002.38	\$926.33	\$955.29	\$981.44	\$981.44	\$981.44
\$ Change			(\$58.21)	\$44.96	\$68.27	(\$76.05)	\$28.96	\$26.15	\$0.00	\$0.00
Percent Change			-6%	5%	7%	-8%	3%	3%	0%	0%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 68. Scenario #4 - Sample Commercial with Fire Line Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				COMMERCIAL	. WITH FIRE LI	NE				
2" METER, 30 CCF/MONTH,	4" FIRE	LINE								
Fixed Charge	<u>Use</u>	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$72.44	\$72.44	\$72.44
Variable Charge	30									
Tier 1		\$8.40								
Tier 2		\$36.13								
Subtotal Variable Charge		\$44.53	\$80.40	\$82.50	\$86.10	\$85.80	\$88.50	\$90.90	\$90.90	\$90.90
WAC Charge*	<u>30</u>	\$37.04	\$2.10	\$4.20	\$6.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$24.89	\$25.88	\$26.50	\$26.50	\$26.50
Total Monthly Water Bill		\$165.35	\$263.38	\$341.46	\$367.75	\$179.02	\$184.67	\$189.84	\$189.84	\$189.84
\$ Change			\$98.03	\$78.08	\$26.29	(\$188.73)	\$5.65	\$5.17	\$0.00	\$0.00
Percent Change			59%	30%	8%	-51%	3%	3%	0%	0%
2" METER, 100 CCF/MONTH	I. 4" FIRE	LINE								
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$72.44	\$72.44	\$72.44
Variable Charge	100									
Tier 1		\$8.40								
Tier 2		\$162.57								
Subtotal Variable Charge		\$170.97	\$268.00	\$275.00	\$287.00	\$286.00	\$295.00	\$303.00	\$303.00	\$303.00
WAC Charge*	<u>100</u>	\$123.48	\$7.00	\$14.00	\$23.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$24.89	\$25.88	\$26.50	\$26.50	\$26.50
Total Monthly Water Bill		\$378.23	\$455.88	\$543.76	\$584.75	\$379.22	\$391.17	\$401.94	\$401.94	\$401.94
\$ Change			\$77.65	\$87.88	\$40.99	(\$205.53)	\$11.95	\$10.77	\$0.00	\$0.00
Percent Change			21%	19%	8%	-35%	3%	3%	0%	0%
2" METER, 300 CCF/MONTH	I, 4" FIRE	LINE								
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$72.44	\$72.44	\$72.44
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		\$523.83								
Subtotal Variable Charge		\$532.23	\$804.00	\$825.00	\$861.00	\$858.00	\$885.00	\$909.00	\$909.00	\$909.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$24.89	\$25.88	\$26.50	\$26.50	\$26.50
Total Monthly Water Bill		\$986.45	\$1,005.88	\$1,121.76	\$1,204.75	\$951.22	\$981.17	\$1,007.94	\$1,007.94	\$1,007.94
\$ Change			\$19.43	\$115.88	\$82.99	(\$253.53)	\$29.95	\$26.77	\$0.00	\$0.00
Percent Change			2%	12%	7%	-21%	3%	3%	0%	0%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 69. Scenario #4 - Sample Irrigation Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				IRRIG	ATION					
2" METER, 150 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 150	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$72.44	\$72.44	\$72.44
Tier 1		\$8.40								
Tier 2		\$252.88								
Subtotal Variable Charge		\$261.28	\$430.50	\$442.50	\$462.00	\$442.50	\$457.50	\$471.00	\$471.00	\$471.00
WAC Charge*	150	\$185.22	\$10.50	\$21.00	\$34.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$491.20	\$505.15	\$530.61	\$568.88	\$510.83	\$527.79	\$543.44	\$543.44	\$543.44
\$ Change			\$13.95	\$25.46	\$38.27	(\$58.05)	\$16.96	\$15.65	\$0.00	\$0.00
Percent Change			3%	5%	7%	-10%	3%	3%	0%	0%
2" METER, 300 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$72.44	\$72.44	\$72.44
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		\$523.83								
Subtotal Variable Charge		\$532.23	\$861.00	\$885.00	\$924.00	\$885.00	\$915.00	\$942.00	\$942.00	\$942.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$947.36	\$946.15	\$994.11	\$1,065.38	\$953.33	\$985.29	\$1,014.44	\$1,014.44	\$1,014.44
\$ Change			(\$1.21)	\$47.96	\$71.27	(\$112.05)	\$31.96	\$29.15	\$0.00	\$0.00
Percent Change			0%	5%	7%	-11%	3%	3%	0%	0%
2" METER, 500 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$72.44	\$72.44	\$72.44
Variable Charge	500									
Tier 1		\$8.40								
Tier 2		\$885.09								
Subtotal Variable Charge		\$893.49	\$1,435.00	\$1,475.00	\$1,540.00	\$1,475.00	\$1,525.00	\$1,570.00	\$1,570.00	\$1,570.00
WAC Charge*	<u>500</u>	\$617.40	\$35.00	\$70.00	\$115.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$1,555.58	\$1,534.15	\$1,612.11	\$1,727.38	\$1,543.33	\$1,595.29	\$1,642.44	\$1,642.44	\$1,642.44
\$ Change			(\$21.43)	\$77.96	\$115.27	(\$184.05)	\$51.96	\$47.15	\$0.00	\$0.00
Percent Change			-1%	5%	7%	-11%	3%	3%	0%	0%

^{*} The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Scenario #4: Proposed Drought Rates

In response to the governor's declaration of a State water emergency and in anticipation of possible mandatory reductions, BWA developed drought rates based on the proposed potable and recycled rates developed in this study. The drought rates could be implemented during mandatory restriction declarations by the City Council. Using 2014/15 estimated total consumption as the base year, the proposed draft rates are based on four stages of curtailment, ranging from 20 to 50 percent of overall reduction. The draft rate is a charge per hcf for all water consumption. Tables 70 through 72 calculate the drought rates under Scenario #4.

Table 70. Scenario #4: Drought Rates - Projected Reduced Consumption Based on 2014/15 Consumption

		% of Curtailment Target	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment	Target		0%	20%	30%	40%	50%
CURTAILME							
-	ly Residential	750/	0.00/	15.00/	22 50/	20.00/	27.50/
Tier 1	0 - 6 hcf	75%	0.0%	-15.0%	-22.5%	-30.0%	-37.5%
Tier 2	6.1 - 12 hcf	100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Tier 3	12.1 - 25 hcf	115%	0.0%	-23.0%	-34.5%	-46.0%	-57.5%
Tier 4	Over 25 hcf	140%	0.0%	-28.0%	-42.0%	-56.0%	-70.0%
Multi-Family	y Residential						
Tier 1	0 - 5 hcf	75%	0.0%	-15.0%	-22.5%	-30.0%	-37.5%
Tier 2	Over 5 hcf	140%	0.0%	-28.0%	-42.0%	-56.0%	-70.0%
Commercial		100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Irrigation		100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
WATER SAI	ES WITH CURTAILM	ENT (HCE)					
	ly Residential	Livi (iici)	2014/15 Proj. Use				
Tier 1	0 - 6 hcf		1,569,829	1,334,350	1,216,620	1,098,880	981,140
Tier 2	6.1 - 12 hcf		1,202,672	962,140	841,870	721,600	601,340
Tier 3	12.1 - 25 hcf		1,283,054	987,950	840,400	692,850	545,300
Tier 4	Over 25 hcf		731,661	526,800	424,360	321,930	219,500
Subtotal	Over 25 fici		4,787,216	3,811,240	3,323,250	2,835,260	2,347,280
	form Dana Vana		, ,	-20.4%	, ,	, ,	
% Reduction	from Base Year		0.0%	-20.4%	-30.6%	-40.8%	-51.0%
Multi-Family	y Residential						
Tier 1	0 - 5 hcf		2,777,601	2,360,960	2,152,640	1,944,320	1,736,000
Tier 2	Over 5 hcf		1,611,321	1,160,150	934,570	708,980	483,400
Subtotal			4,388,922	3,521,110	3,087,210	2,653,300	2,219,400
% Reduction	from Base Year		0.0%	-19.8%	-12.3%	-14.1%	-16.4%
Commercial			2,243,447	1,794,760	1,570,410	1,346,070	1,121,720
% Reduction	from Base Year		0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Irrigation			543,876	435,100	380,710	326,330	271,940
% Reduction	from Base Year		0.0%	-20.0%	-30.0%	-40.0%	-50.0%
	otal Water Sales		11,963,461	9,562,210	8,361,580	7,160,960	5,960,340
% Reduction	from Base Year		0.0%	-20.1%	-30.1%	-40.1%	-50.2%

Table 71. Scenario #4: Drought Rates - Projected Reduced Revenues Based on Reduced Consumption

	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment Target	0%	20%	30%	40%	50%
ANNUAL WATER SALES (HCF)					
Single-Family Residential	2014/15 Proj. Use				
Tier 1	1,569,829	1,334,350	1,216,620	1,098,880	981,140
Tier 2	1,202,672	962,140	841,870	721,600	601,340
Tier 3	1,283,054	987,950	840,400	692,850	545,300
Tier 4		-	424,360	•	
Subtotal	<u>731,661</u> 4,787,216	<u>526,800</u> 3,811,240	3,323,250	<u>321,930</u> 2,835,260	<u>219,500</u> 2,347,280
as the end of sold and					
Multi-Family Residential	2 === 604	2 252 252	2.452.540	4 0 4 4 0 0 0	4 705 000
Tier 1	2,777,601	2,360,960	2,152,640	1,944,320	1,736,000
Tier 2	<u>1,611,321</u>	<u>1,160,150</u>	<u>934,570</u>	708,980	483,400
Subtotal	4,388,922	3,521,110	3,087,210	2,653,300	2,219,400
Commercial	2,243,447	1,794,760	1,570,410	1,346,070	1,121,720
Irrigation	543,876	435,100	380,710	326,330	271,940
Total Water Sales	11,963,461	9,562,210	8,361,580	7,160,960	5,960,340
VARIABLE RATES	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014
Single-Family Residential	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014
	ć2 21	ć2 21	ć2 21	ć2 21	ć2 21
Tier 1	\$2.31	\$2.31	\$2.31	\$2.31	\$2.31
Tier 2	\$2.84	\$2.84	\$2.84	\$2.84	\$2.84
Tier 3	\$3.22	\$3.22	\$3.22	\$3.22	\$3.22
Tier 4	\$3.90	\$3.90	\$3.90	\$3.90	\$3.90
Multi-Family Residential					
Tier 1	\$2.42	\$2.42	\$2.42	\$2.42	\$2.42
Tier 2	\$3.56	\$3.56	\$3.56	\$3.56	\$3.56
Commercial	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86
Irrigation	\$2.95	\$2.95	\$2.95	\$2.95	\$2.95
REVENUES WITH CURTAILMENT					
Single-Family Residential					
Tier 1	\$3,626,305	\$3,082,349	\$2,810,392	\$2,538,413	\$2,266,433
Tier 2	3,415,588	2,732,478	2,390,911	2,049,344	1,707,806
Tier 3	4,131,434	3,181,199	2,706,088	2,230,977	1,755,866
Tier 4	2,853,478	<u>2,054,520</u>	1,655,004	<u>1,255,527</u>	<u>856,050</u>
Subtotal	14,026,805	11,050,545	9,562,395	8,074,261	6,586,155
Multi-Family Residential					
Tier 1	\$6,721,794	\$5,713,523	\$5,209,389	\$4,705,254	\$4,201,120
Tier 2					\$4,201,120 <u>1,720,904</u>
Subtotal	<u>5,736,303</u> 12,458,097	<u>4,130,134</u> 9,843,657	3,327,069 8,536,458	<u>2,523,969</u> 7,229,223	<u>1,720,904</u> 5,922,024
Commercial	\$6,416,258	\$5,133,014	\$4,491,373	\$3,849,760	\$3,208,119
Irrigation	\$1,604,434	\$1,283,545	\$1,123,095	\$962,674	\$802,223
Total	\$34,505,595	\$27,310,761	\$23,713,320	\$20,115,918	\$16,518,521
Revenue Loss with Curtailment	\$0	\$7,194,834	\$10,792,275	\$14,389,677	\$17,987,074
	30	Ÿ,,±J4,034	Q10,732,273	71 →,303,011	917,307,074

Table 72. Scenario #4: Projected Drought Rates for 2014/15

	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment Target	0%	20%	30%	40%	50%
Water Sales Impact (hcf) Reduced Water Sales (hcf) Water Sales with Curtailment (hcf)	0 11,963,461	2,392,700 9,570,761	3,589,000 8,374,461	4,785,400 7,178,061	5,981,700 5,981,761
Add'l Revenue Requirement Water Sales Revenue Loss (1) Reduced O&M (2) Add'l Conservation Program Costs Total Add'l Revenue Requirement	\$0 \$0 \$0	\$7,195,000 \$0 <u>\$100,000</u> \$7,295,000	\$0 <u>\$200,000</u>	\$0 \$300,000	\$17,987,000 \$0 \$400,000 \$18,387,000
DROUGHT CHARGE PER HCF		\$0.76	\$1.31	\$2.05	\$3.07

SECTION 12: RATE SCENARIO #5

Scenario #5 includes four years of rate increases (4%, 4%, 4%, 4%) through 2017/18. Based on this scenario, the water utility will continue to operate in a negative cash balance through 2016/17. The cash balance at the end of 2018/19 is projected at approximately \$4.9 million.

Table 73. Scenario #5: 4-4-4-4 - Cash Flow Projection

	Projected			Five-Year Plan		
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Assumptions:						
Revenue Adjustment (Assumes 12 months of rate increases)		4.0%	4.0%	4.0%	4.0%	0.0%
Interest Earnings Rate	0.5%	0.3%	0.5%	0.5%	1.0%	1.0%
Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Operating Revenues - Charges for Services						
Potable Sales Based on 12 Months of Increases	\$44,517,200	\$46,529,000	\$48,212,000	\$50,391,000	\$52,669,000	\$52,932,000
Recycled Water Sales Based on 12 Months of Increases	1,955,000	2,043,000	2,117,000	2,213,000	2,313,000	2,325,000
Total Water Sales Based on 12 Months of Increases	46,472,200	48,572,000	50,329,000	52,604,000	54,982,000	55,257,000
Operating Revenues - Charges for Services						
Potable Sales	\$44,517,200	\$46,127,000	\$48,212,000	\$50,391,000	\$52,669,000	\$52,932,000
Recycled Sales	1,955,000	2,025,000	2,117,000	2,213,000	2,313,000	2,325,000
Fireline Credit	-	(3,400,000)	-	-	-	
Total Retail Sales	46,472,200	44,752,000	50,329,000	52,604,000	54,982,000	55,257,000
Operating Expenses						
Production	25,045,200	24,092,800	25,186,600	26,096,500	27,455,500	28,405,200
Transmission and Distribution	10,663,200	11,369,400	12,394,700	12,633,500	13,058,600	13,582,500
Customer Services	2,797,200	2,750,000	2,819,300	2,903,700	2,990,700	3,080,500
Depreciation	5,403,600	5,254,500	5,825,000	6,350,000	6,875,000	7,400,000
Total Operating Expenses	43,909,200	43,466,700	46,225,600	47,983,700	50,379,800	52,468,200
Operating Income	2,563,000	1,285,300	4,103,400	4,620,300	4,602,200	2,788,800
Non-Operating Revenues and Expenses						
Revenue from Customer Paid Projects	140,000	1,940,700	1,940,700	1,740,700	1,740,700	1,740,700
Non-Operating Income	1,541,100	1,435,000	985,000	985,000	985,000	985,000
Non-Operating Expense (Interest Expense)	(3,118,000)	(3,514,300)	(3,477,600)	(3,437,800)	(3,384,800)	(3,330,000)
Total Non-operating Revenues, net	(1,436,900)	(138,600)	(551,900)	(712,100)	(659,100)	(604,300)
Net Income Before Transfers	1,126,100	1,146,700	3,551,500	3,908,200	3,943,100	2,184,500
Gladys Drive Reimbursement	1,000,000	_	_	_	_	_
Net Income (Loss)	126,100	1,146,700	3,551,500	3,908,200	3,943,100	2,184,500
	120,100	1,1 10,7 00	3,331,300	3,300,200	3,3 13,100	2,10 1,500
Beginning Unrestricted Cash Reserves	(14,186,600)	(10,218,400)	(7,824,400)	(3,173,600)	(31,938)	3,109,724
Add Non Cash Expense - Depreciation	5,403,600	5,254,500	5,825,000	6,350,000	6,875,000	7,400,000
Net Unrestricted Cash Reserves	(\$8,783,000)	(4,963,900)	(1,999,400)	3,176,400	6,843,062	10,509,724
Add Net Income Add Bond Proceeds	126,100	1,146,700	3,551,500	3,908,200	3,943,100	2,184,500
Less Bond Principal Payments - 2008 Bonds	(1,210,000)	(1,245,000)	(1,285,000)	(1,325,000)	(1,370,000)	(1,420,000)
Less Bond Principal Payments - 2012 Bonds	-	-	-	-	(415,000)	(435,000)
Less Capital Expenditures - Pay Go	(272,000)	(821,500)	(1,500,000)	(4,050,838)	(4,150,738)	(4,150,738)
Less Capital Expenditures - Customer Paid	(79,500)	(1,940,700)	(1,940,700)	(1,740,700)	(1,740,700)	(1,740,700)
Revenues Less Expenses	(1,435,400)	(2,860,500)	(1,174,200)	(3,208,338)	(3,733,338)	(5,561,938)
Ending Unrestricted Cash Reserves	(10,218,400)	(7,824,400)	(3,173,600)	(31,938)	3,109,724	4,947,786
Beginning Bond Proceeds	28,525,100	21,014,082	5,554,874	-	_	_
Bonds Proceeds	-,,		-,,	-	-	-
Less Capital Expenditures - Bonds	(7,511,018)	(15,459,208)	(5,554,874)	-	-	-
Ending Bond Proceeds	21,014,082	5,554,874	-	-	-	-
Delit Carrier Communication Co	2.2-		2.2-	2.5.	2.1.	
Debt Service Coverage - Min. 1.25	2.20	1.68	2.29	2.51	2.41	2.16
Debt Service Coverage Met	yes	yes	yes	yes	yes	yes
Minimum Cash Dasana Targat	11 200 000	11 200 000	11 200 000	11 200 000	11 200 000	11 200 000
Minimum Cash Reserve Target Cash Reserve Target Met	11,300,000 no	11,300,000 no	11,300,000 no	11,300,000 no	11,300,000 no	11,300,000 no
ouseserve rarget met	110	110	110	110	110	110

 $[\]ensuremath{\text{1}}$ - Revenues for 2014/15 have been adjusted for September 1, 2014 effective date.

Scenario #5: Proposed Rates

The following tables shows a 4-year schedule of proposed water rates for Scenario #5 incorporating a) the overall level of required rate increases to fund GWP's costs of providing service, b) the proposed rate structure adjustments, and c) the revenue recovery allocations that fairly apportion costs to all customers. The first rate adjustment will be effective September 1, 2014. Rate increases thereafter will be effective on July 1 of each year.

Table 74. Scenario #5: Proposed Potable Water Rates

	MONTHLY WATE	R CUSTOME	R CHARGES			
	Current			Projected		
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$21.18	\$20.60	\$21.24	\$22.08	\$22.98	\$22.98
3/4"	\$24.83	\$26.14	\$26.94	\$28.02	\$29.15	\$29.15
1.0"	\$32.15	\$34.44	\$35.51	\$36.92	\$38.42	\$38.42
1.5"	\$50.43	\$56.59	\$58.34	\$60.67	\$63.12	\$63.12
2.0"	\$72.38	\$67.66	\$69.75	\$72.54	\$75.47	\$75.47
3.0"	\$123.58	\$233.74	\$240.99	\$250.62	\$260.75	\$260.75
4.0"	\$196.72	\$455.18	\$469.31	\$488.06	\$507.79	\$507.79
6.0"	\$379.59	\$842.70	\$868.87	\$903.58	\$940.11	\$940.11
8.0"	\$599.02	\$1,949.90	\$2,010.47	\$2,090.78	\$2,175.31	\$2,175.31
10.0"	\$855.03	\$3,057.10	\$3,152.07	\$3,277.98	\$3,410.51	\$3,410.51
12.0"	-	\$3,057.10	\$3,152.07	\$3,277.98	\$3,410.51	\$3,410.51

DAILY WATER CU	JSTOMER CHA	ARGES (MONT	HLY CHARGE	(/30 DAYS)		
	Current			Projected		
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$0.71	\$0.69	\$0.71	\$0.74	\$0.77	\$0.77
3/4"	\$0.83	\$0.87	\$0.90	\$0.93	\$0.97	\$0.97
1.0"	\$1.07	\$1.15	\$1.18	\$1.23	\$1.28	\$1.28
1.5"	\$1.68	\$1.89	\$1.94	\$2.02	\$2.10	\$2.10
2.0"	\$2.41	\$2.26	\$2.33	\$2.42	\$2.52	\$2.52
3.0"	\$4.12	\$7.79	\$8.03	\$8.35	\$8.69	\$8.69
4.0"	\$6.56	\$15.17	\$15.64	\$16.27	\$16.93	\$16.93
6.0"	\$12.65	\$28.09	\$28.96	\$30.12	\$31.34	\$31.34
8.0"	\$19.97	\$65.00	\$67.02	\$69.69	\$72.51	\$72.51
10.0"	\$28.50	\$101.90	\$105.07	\$109.27	\$113.68	\$113.68
12.0"	-	\$101.90	\$105.07	\$109.27	\$113.68	\$113.68

	MONTHLY VA	RIABLE CHAR	GES - DOES N	IOT INCLUD	E WATER A	DJUSTMEN	T CHARGES	i
			SINGLE FAM	11LY RESIDENT	TAL			
	Current	Proposed	Current			Projected		
	Monthly Tiers	Monthly Tiers	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
Tier 1	0 - 6.26 hcf	0 - 6 hcf	\$1.72	\$2.27	\$2.34	\$2.45	\$2.57	\$2.57
Tier 2	6.27 - 12.52 hcf	6.1 - 12 hcf	\$2.18	\$2.80	\$2.87	\$3.02	\$3.19	\$3.19
Tier 3	12.53 - 31.03 hcf	12.1 - 25 hcf	\$3.18	\$3.18	\$3.25	\$3.43	\$3.63	\$3.63
Tier 4	31.04 - 40.28 hcf	Over 25 hcf	\$3.54	\$3.86	\$3.93	\$4.17	\$4.42	\$4.42
Tier 5	Over 40.28 hcf		\$4.13	-	-	-	-	-

			MULTI- FAI	MILY RESIDENT	ΓIAL			
	Current	Proposed	Current (1) Projected					
	Monthly Tiers	Monthly Tiers	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
Tier 1	0 - 5.10 hcf	0 - 5 hcf	\$1.81	\$2.38	\$2.45	\$2.56	\$2.69	\$2.69
Tier 2	5.11 - 10.20 hcf	Over 5 hcf	\$3.03	\$3.52	\$3.59	\$3.75	\$3.97	\$3.97
Tier 3	Over 10.20 hcf		\$3.60	-	-	-	-	-

COMMERCIAL								
	Current	Current Projected						
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
All Consumption per hcf	\$2.87	\$2.81	\$2.91	\$3.04	\$3.18	\$3.18		

IRRIGATION									
	Current Projected								
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19			
All Consumption per hcf	\$3.08	\$2.90	\$3.00	\$3.14	\$3.30	\$3.30			

 $^{1 -} The \ tier \ breakpoints \ for \ multi-family \ customers \ are \ prorated \ based \ on \ the \ number \ of \ dwelling \ units \ for \ each \ account.$

Table 75. Scenario #5: Proposed Recycled Water Rates

	MONTHLY RECY	CLED WATER	CUSTOMER	CHARGE		
	Current			Projected		
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$15.89	\$17.51	\$18.05	\$18.77	\$19.53	\$19.53
3/4"	\$18.62	\$22.22	\$22.90	\$23.82	\$24.78	\$24.78
1.0"	\$24.11	\$29.27	\$30.18	\$31.38	\$32.66	\$32.66
1.5"	\$37.82	\$48.10	\$49.59	\$51.57	\$53.65	\$53.65
2.0"	\$54.29	\$57.51	\$59.29	\$61.66	\$64.15	\$64.15
3.0"	\$92.69	\$198.68	\$204.84	\$213.03	\$221.64	\$221.64
4.0"	\$147.54	\$386.90	\$398.91	\$414.85	\$431.62	\$431.62
6.0"	\$284.69	\$716.30	\$738.54	\$768.04	\$799.09	\$799.09
8.0"	\$449.27	\$1,657.42	\$1,708.90	\$1,777.16	\$1,849.01	\$1,849.01
10.0"	\$641.27	\$2,598.54	\$2,679.26	\$2,786.28	\$2,898.93	\$2,898.93
12.0"	-	\$2,598.54	\$2,679.26	\$2,786.28	\$2,898.93	\$2,898.93

	DAILY RECYCLED WATER CUS	TOMER CHARG	E (MONTHLY C	HARGE/30 DA	YS)	
	Current					
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$0.53	\$0.58	\$0.60	\$0.63	\$0.65	\$0.65
3/4"	\$0.62	\$0.74	\$0.76	\$0.79	\$0.83	\$0.83
1.0"	\$0.80	\$0.98	\$1.01	\$1.05	\$1.09	\$1.09
1.5"	\$1.26	\$1.60	\$1.65	\$1.72	\$1.79	\$1.79
2.0"	\$1.81	\$1.92	\$1.98	\$2.06	\$2.14	\$2.14
3.0"	\$3.09	\$6.62	\$6.83	\$7.10	\$7.39	\$7.39
4.0"	\$4.92	\$12.90	\$13.30	\$13.83	\$14.39	\$14.39
6.0"	\$9.49	\$23.88	\$24.62	\$25.60	\$26.64	\$26.64
8.0"	\$14.98	\$55.25	\$56.96	\$59.24	\$61.63	\$61.63
10.0"	\$21.38	\$86.62	\$89.31	\$92.88	\$96.63	\$96.63
12.0"	-	\$86.62	\$89.31	\$92.88	\$96.63	\$96.63

MONTHLY RECYCLED WATER VARIABLE CHARGES								
COMMERCIAL RECYCLED WATER RATE								
	Current	Projected						
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
Water Variable Charge	\$2.1500 \$2.39 \$2.47 \$2.58 \$2.70 \$2.70							

IRRIGATION RECYCLED WATER RATE									
	Current	Projected							
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19			
Water Variable Charge	\$2.3100	\$2.47	\$2.55	\$2.67	\$2.81	\$2.81			

^{1 -} Beginning in 2014/15, the recycled water customer charge and variable rates will be based on a 15% discount from the potable rates.

Table 76. Scenario #5: Proposed Private Fire Line Rates (1)

	М	ONTHLY PRIVATE FIRE LINE	CUSTOMER	CHARGE							
	Current		Projected								
Fire Line Service Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19					
1" (2)	-	\$8.03	\$8.27	\$8.60	\$8.95	\$8.95					
1-1/2" (2)	-	\$8.89	\$9.14	\$9.51	\$9.90	\$9.90					
2.0"	\$13.4725	\$10.37	\$10.66	\$11.09	\$11.55	\$11.55					
3.0"	\$28.1415	\$15.67	\$16.08	\$16.75	\$17.44	\$17.44					
4.0"	\$202.37	\$24.82	\$25.44	\$26.51	\$27.61	\$27.61					
6.0"	\$395.98	\$57.67	\$59.01	\$61.55	\$64.11	\$64.11					
8.0"	\$633.96	\$114.32	\$116.93	\$121.98	\$127.06	\$127.06					
10.0"	\$917.86	\$199.54	\$204.04	\$212.88	\$221.74	\$221.74					
12.0" (2)	-	\$317.65	\$324.77	\$338.86	\$352.97	\$352.97					

D	AILY PRIVATE	FIRE LINE WATER CUSTOMER C	HARGE (MON	THLY CHARGE/	30 DAYS)		
	Current		Projected	cted			
Fire Line Service Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19	
1" (2)		\$0.27	\$0.28	\$0.29	\$0.30	\$0.30	
1-1/2" (2)	-	\$0.30	\$0.30	\$0.32	\$0.33	\$0.33	
2.0"	\$0.45	\$0.35	\$0.36	\$0.37	\$0.39	\$0.39	
3.0"	\$0.94	\$0.52	\$0.54	\$0.56	\$0.58	\$0.58	
4.0"	\$6.75	\$0.83	\$0.85	\$0.88	\$0.92	\$0.92	
6.0"	\$13.20	\$1.92	\$1.97	\$2.05	\$2.14	\$2.14	
8.0"	\$21.13	\$3.81	\$3.90	\$4.07	\$4.24	\$4.24	
10.0"	\$30.60	\$6.65	\$6.80	\$7.10	\$7.39	\$7.39	
12.0" (2)	-	\$10.59	\$10.83	\$11.30	\$11.77	\$11.77	

	MONTHLY PRIVATE FIRE VARIABLE CHARGES											
	Current	Proposed		P	rojected (3)							
Current Tiers	Jan 1, 2014	Tiers (3)	2014/15	2015/16	2016/17	2017/18	2018/19					
0 - 10 hcf	\$0.9204	All Use	\$2.81	\$2.91	\$3.04	\$3.18	\$3.18					
Over 10 hcf	\$2.0709											

 $[\]bf 1$ - Private fire line rates for 4" service and larger were suspended in January 2014.

^{2 -} Currently has no rate

³ - Beginning in 2014/15, the variable charge for private fire lines will be equal to the potable commercial rate.

Scenario #5: Water Rate Impacts

The following tables show sample bill impacts for a selection of customer profiles for Scenario #5. The proposed revenue adjustments do not imply that each customer will receive the same percentage increase in their bill. The bill impacts will vary for each customer as a result of the proposed fixed meter charge adjustments, the proposed variable rate structure changes, and each individual customer's actual consumption levels. Note that water consumption, particularly for single family customers, typically varies from month to month due to seasonal variations in weather and/or other factors. Hence customers could face a range of impacts throughout the year depending on their level of water use in each billing period.

The sample bill impacts do not include any future WAC increases. The WAC is calculated twice a year and recovers any additional costs of water purchases and energy costs that exceed the annual budget. The WAC can either increase or decrease semi-annually and is based on the cost of purchased water from MWD and the cost of purchased energy for the previous 6 months.

Table 77. Scenario #5 - Sample Single Family Bill Impacts*

					ent Projected					
	Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19	
			SINGLE FAMI	LY RESIDENTIA	\L					
+										
Use	\$15.66	\$21.97	\$23.01	\$24.83	\$26.14	\$26.94	\$28.02	\$29.15	\$29.15	
10										
	\$8.40	\$9.53	\$9.97	\$10.78	\$13.62	\$14.04	\$14.70	\$15.42	\$15.42	
	-	\$7.05	\$7.46	\$8.13	\$11.20	\$11.48	\$12.08	\$12.76	\$12.76	
	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	
	=	Ξ	Ξ.	=	Ξ	Ξ	Ξ.	Ē	=	
	\$8.40	\$16.58	\$17.43	\$18.92	\$24.82	\$25.52	\$26.78	\$28.18	\$28.18	
<u>10</u>	\$12.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	\$36.41	\$38.55	\$40.44	\$43.75	\$50.96	\$52.46	\$54.80	\$57.33	\$57.33	
		\$2.14	\$1.89	\$3.31	\$7.21	\$1.50	\$2.34	\$2.53	\$0.00	
		6%	5%	8%	16%	3%	4%	5%	0%	
4										
	\$15.66	\$21.97	\$23.01	\$24.83	\$26.14	\$26.94	\$28.02	\$29.15	\$29.15	
19	7-0:00	7	7	72	7-0	7=0.0	7	7	7	
	\$8.40	\$9.53	\$9.97	\$10.78	\$13.62	\$14.04	\$14.70	\$15.42	\$15.42	
		•					•		\$19.14	
	_	\$19.54	\$19.93	\$20.57		\$22.75	•		\$25.41	
	_		-	· -	· -			· ·		
	-	-	-	-	-	-	-	-	-	
	\$24.66	\$40.92	\$42.44	\$45.03	\$52.68	\$54.01	\$56.83	\$59.97	\$59.97	
19	\$23.46	\$0.71	\$1.36	\$2.26	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	\$63.78	\$63.60	\$66.81	\$72.12	\$78.82	\$80.95	\$84.85	\$89.12	\$89.12	
		(\$0.17)	\$3.20	\$5.32	\$6.70	\$2.13	\$3.90	\$4.27	\$0.00	
		0%	5%	8%	9%	3%	5%	5%	0%	
	\$15.66	\$21.97	\$23.01	\$24.83	\$26.14	\$26.94	\$28.02	\$29.15	\$29.15	
	\$8.40	\$9.53	\$9.97	\$10.78	\$13.62	\$14.04	\$14.70	\$15.42	\$15.42	
		•					•		\$19.14	
	-		•				•		\$47.19	
	-	\$30.99	\$31.54	\$32.75	\$96.50	\$98.25	\$104.25	\$110.50	\$110.50	
	-	\$37.38	\$38.35	\$40.10						
	\$80.65	\$145.65	\$149.42	\$156.16	\$168.26	\$171.76	\$181.66	\$192.25	\$192.25	
<u>50</u>	\$61.74	\$4.31	\$8.44	\$13.88	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	\$158.05	\$171.93	\$180.87	\$194.87	\$194.40	\$198.70	\$209.68	\$221.40	\$221.40	
		\$13.89	\$8.93	\$14.00	(\$0.47)	\$4.30	\$10.98	\$11.72	\$0.00	
		9%	5%	8%	0%	2%	6%	6%	0%	
-	10 10 H Use 19 19 Use 50	Use \$15.66	Use \$15.66 \$21.97	H USE 10 \$8.40 \$9.53 \$9.97 - \$7.05 \$7.46	H USE 10 \$8.40 \$9.53 \$9.97 \$10.78 - \$7.05 \$7.46 \$8.13 - \$8.40 \$16.58 \$17.43 \$18.92 \$8.40 \$36.41 \$38.55 \$40.44 \$43.75 \$2.14 \$1.89 \$3.31 \$6% \$5% 8% H USE 19 \$8.40 \$9.53 \$9.97 \$10.78 \$36.41 \$38.55 \$40.44 \$43.75 \$2.14 \$1.89 \$3.31 \$6% \$5% 8% H USE 19 \$8.40 \$9.53 \$9.97 \$10.78 \$16.26 \$11.85 \$12.54 \$19.93 \$20.57 - \$19.54 \$19.93 \$20.57 - \$24.66 \$40.92 \$42.44 \$45.03 \$19 \$24.66 \$40.92 \$42.44 \$45.03 \$19 \$23.46 \$60.71 \$13.66 \$2.26 \$63.78 \$63.60 \$66.81 \$72.12 \$(\$0.17) \$3.20 \$5.32 \$6% \$5% 8% H USE 50 \$8.40 \$9.53 \$9.97 \$10.78	Use \$15.66 \$21.97 \$23.01 \$24.83 \$26.14	H Use \$15.66 \$21.97 \$23.01 \$24.83 \$26.14 \$26.94	HUSE S15.66 S21.97 S23.01 S24.83 S26.14 S26.94 S28.02	H Use \$15.66 \$21.97 \$23.01 \$24.83 \$26.14 \$26.94 \$28.02 \$29.15	

 $^{^{\}ast}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 78. Scenario #5 - Sample Multi-Family Bill Impacts*

		Actual		Current			Projected		
	Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
			MULTI-FAMII	Y RESIDENTIA	\L				
/MONTH									
Use	\$15.66	\$28.46	\$29.79	\$32.15	\$34.44	\$35.51	\$36.92	\$38.42	\$38.42
50									
	\$8.40	\$41.14	\$43.18	\$46.25	\$59.50	\$61.25	\$64.00	\$67.25	\$67.25
	\$72.25	\$71.39	\$72.37	\$74.08	\$88.00	\$89.75	\$93.75	\$99.25	\$99.25
	=	Ξ	Ξ.	=	Ξ.	Ξ	Ξ.	Ξ	
	\$80.65	\$112.53	\$115.55	\$120.33	\$147.50	\$151.00	\$157.75	\$166.50	\$166.50
<u>50</u>	\$61.74	\$2.94	\$5.88	\$9.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$158.05	\$143.93	\$151.22	\$162.03	\$181.94	\$186.51	\$194.67	\$204.92	\$204.92
		(\$14.12)	\$7.29	\$10.81	\$19.91	\$4.57	\$8.16	\$10.25	\$0.00
		-9%	5%	7%	12%	3%	4%	5%	0%
/MONTH									
Use	\$15.66	\$28.46	\$29.79	\$32.15	\$34.44	\$35.51	\$36.92	\$38.42	\$38.42
70									
	\$8.40	\$41.14	\$43.18	\$46.25	\$59.50	\$61.25	\$64.00	\$67.25	\$67.25
	\$108.38	\$74.61	\$75.63	\$77.42	\$158.40	\$161.55	\$168.75	\$178.65	\$178.65
	=	\$64.81	\$66.14	\$68.22	=	=	=	=	
	\$116.78	\$180.55	\$184.94	\$191.88	\$217.90	\$222.80	\$232.75	\$245.90	\$245.90
70	\$86.44	\$5.33	\$10.67	\$17.34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$218.87	\$214.34	\$225.40	\$241.37	\$252.34	\$258.31	\$269.67	\$284.32	\$284.32
		(\$4.53)	\$11.06	\$15.97	\$10.97	\$5.97	\$11.36	\$14.65	\$0.00
		-2%	5%	7%	5%	2%	4%	5%	0%
E/MONT	ш								
•	ı	\$28.46	\$29.79	\$32.15	\$34.44	\$35.51	\$36.92	\$38.42	\$38.42
	ψ15.00	Q20110	Ψ23.73	Ų32.13	ψ5	ψ55.51	ψ30.3 2	ψ30. I.Z	φ30 <u>L</u>
100	\$8.40	\$41.14	\$43.18	\$46.25	\$59.50	\$61.25	\$64.00	\$67.25	\$67.25
							•		\$297.75
	-		\$170.84	\$176.22	-	-	-	-	
	\$170.97	\$283.15	\$289.64	\$299.88	\$323.50	\$330.50	\$345.25	\$365.00	\$365.00
100	\$123.48	\$8.93	\$17.87	\$29.04	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$310.10	\$320.54	\$337.30	\$361.07	\$357.94	\$366.01	\$382.17	\$403.42	\$403.42
		\$10.44	\$16.76	\$23.77	(\$3.13)	\$8.07	\$16.16	\$21.25	\$0.00
		3%	5%	7%	-1%	2%	4%	6%	0%
	Use 50 50	### \$15.66 \$15.66 \$15.66 \$8.40 \$72.25 \$80.65 \$61.74 \$158.05	Section Sect	MULTI-FAMI MONTH USe \$15.66 \$28.46 \$29.79 \$8.40 \$41.14 \$43.18 \$72.25 \$71.39 \$72.37 \$80.65 \$112.53 \$115.55 \$80.65 \$112.53 \$115.55 \$61.74 \$2.94 \$5.88 \$158.05 \$143.93 \$151.22 \$70 \$8.40 \$41.14 \$43.18 \$108.38 \$74.61 \$75.63 \$116.78 \$180.55 \$184.94 \$70 \$86.44 \$5.33 \$10.67 \$218.87 \$214.34 \$225.40 \$225.40 \$64.53 \$11.06 \$28.40 \$41.14 \$43.18 \$16.75 \$56.31 \$10.67 \$16.74 \$5.33 \$10.67 \$218.87 \$214.34 \$225.40 \$25.40 \$64.53 \$11.06 \$15.66 \$28.46 \$29.79 \$15.66 \$28.46 \$29.79 \$15.66 \$28.46 \$29.79 \$15.66 \$28.46 \$29.79 \$15.66 \$28.46 \$29.79 \$15.66 \$28.46 \$29.79 \$100 \$8.40 \$41.14 \$43.18 \$162.57 \$74.61 \$75.63 \$167.41 \$170.84 \$170.97 \$283.15 \$289.64 \$100 \$123.48 \$8.93 \$17.87 \$310.10 \$320.54 \$337.30	MULTI-FAMILY RESIDENTIA	MULTI-FAMILY RESIDENTIAL	MULTI-FAMILY RESIDENTIAL Use	MULTI-FAMILY RESIDENTIAL	MULTI-FAMILY RESIDENTIAL

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 79. Scenario #5 - Sample Commercial Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				COM	/IERCIAL					
2" METER, 30 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 30	\$44.70	\$64.15	\$67.11	\$72.38	\$67.66	\$69.75	\$72.54	\$75.47	\$75.47
Tier 1 Tier 2		\$8.40 <u>\$36.13</u>								
Subtotal Variable Charge		\$44.53	\$80.40	\$82.50	\$86.10	\$84.30	\$87.30	\$91.20	\$95.40	\$95.40
WAC Charge*	30	\$37.04	\$2.10	\$4.20	\$6.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$126.27	\$146.65	\$153.81	\$165.38	\$151.96	\$157.05	\$163.74	\$170.87	\$170.87
\$ Change			\$20.38	\$7.16	\$11.57	(\$13.42)	\$5.09	\$6.69	\$7.13	\$0.00
Percent Change			16%	5%	8%	-8%	3%	4%	4%	0%
2" METER, 100 CCF/MONTH	I									
Fixed Charge Variable Charge	<u>Use</u> 100	\$44.70	\$64.15	\$67.11	\$72.38	\$67.66	\$69.75	\$72.54	\$75.47	\$75.47
Tier 1		\$8.40								
Tier 2 Subtotal Variable Charge		\$162.57 \$170.97	\$268.00	\$275.00	\$287.00	\$281.00	\$291.00	\$304.00	\$318.00	\$318.00
	100		\$268.00	•		•	\$0.00	\$0.00	•	•
WAC Charge*	100	\$123.48		\$14.00	\$23.00	\$0.00			\$0.00	\$0.00
Total Monthly Water Bill		\$339.14	\$339.15	\$356.11	\$382.38	\$348.66	\$360.75	\$376.54	\$393.47	\$393.47
\$ Change			\$0.01	\$16.96	\$26.27	(\$33.72)	\$12.09	\$15.79	\$16.93	\$0.00
Percent Change			0%	5%	7%	-9%	3%	4%	4%	0%
2" METER, 300 CCF/MONTH	ı									
Fixed Charge Variable Charge	<u>Use</u> 300	\$44.70	\$64.15	\$67.11	\$72.38	\$67.66	\$69.75	\$72.54	\$75.47	\$75.47
Tier 1		\$8.40								
Tier 2		\$523.83								
Subtotal Variable Charge		\$532.23	\$804.00	\$825.00	\$861.00	\$843.00	\$873.00	\$912.00	\$954.00	\$954.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$947.36	\$889.15	\$934.11	\$1,002.38	\$910.66	\$942.75	\$984.54	\$1,029.47	\$1,029.47
\$ Change			(\$58.21)	\$44.96	\$68.27	(\$91.72)	\$32.09	\$41.79	\$44.93	\$0.00
Percent Change			-6%	5%	7%	-9%	4%	4%	5%	0%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 80. Scenario #5 - Sample Commercial with Fire Line Bill Impacts*

Dec 15, 2010								
DCC 13, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
		COMMERCIAL	. WITH FIRE L	NE				
IRE LINE								
	\$64.15	\$67.11	\$72.38	\$67.66	\$69.75	\$72.54	\$75.47	\$75.47
	Ć00 40	ć02 F0	¢0C 10	¢04.20	ć07.20	ć01 20	Ć0F 40	Ć0F 40
	•			•	•			\$95.40
9 \$37.04	\$2.10	\$4.20	\$6.90	<u>\$0.00</u>	\$0.00	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
\$39.08	\$116.73	\$187.65	\$202.37	\$24.82	\$25.44	\$26.51	\$27.61	\$27.61
\$165.35	\$263.38	\$341.46	\$367.75	\$176.78	\$182.49	\$190.25	\$198.48	\$198.48
	\$98.03	\$78.08	\$26.29	(\$190.97)	\$5.71	\$7.76	\$8.23	\$0.00
	59%	30%	8%	-52%	3%	4%	4%	0%
FIRE LINE								
1 .	\$64.15	\$67.11	\$72.38	\$67.66	\$69.75	\$72.54	\$75.47	\$75.47
0								
\$8.40								
\$162.57								
\$170.97	\$268.00	\$275.00	\$287.00	\$281.00	\$291.00	\$304.00	\$318.00	\$318.00
<u>0</u> \$123.48	\$7.00	\$14.00	\$23.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$39.08	\$116.73	\$187.65	\$202.37	\$24.82	\$25.44	\$26.51	\$27.61	\$27.61
\$378.23	\$455.88	\$543.76	\$584.75	\$373.48	\$386.19	\$403.05	\$421.08	\$421.08
	\$77.65	\$87.88	\$40.99	(\$211.27)	\$12.71	\$16.86	\$18.03	\$0.00
	21%	19%	8%	-36%	3%	4%	4%	0%
FIRE LINE								
1	\$64.15	\$67.11	\$72.38	\$67.66	\$69.75	\$72.54	\$75.47	\$75.47
0								
\$8.40								
\$523.83								
\$532.23	\$804.00	\$825.00	\$861.00	\$843.00	\$873.00	\$912.00	\$954.00	\$954.00
<u>0</u> \$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$39.08	\$116.73	\$187.65	\$202.37	\$24.82	\$25.44	\$26.51	\$27.61	\$27.61
\$986.45	\$1,005.88	\$1,121.76	\$1,204.75	\$935.48	\$968.19	\$1,011.05	\$1,057.08	\$1,057.08
	\$19.43	\$115.88	\$82.99	(\$269.27)	\$32.71	\$42.86	\$46.03	\$0.00
	2%	12%	7%	-22%	3%	4%	5%	0%
<u>s</u> <u>c</u>	0 \$8.40 \$36.13 \$44.53 0 \$37.04 \$39.08 \$165.35 'FIRE LINE \$44.70 00 \$8.40 \$162.57 \$170.97 \$123.48 \$39.08 \$378.23 'FIRE LINE \$44.70 00 \$8.40 \$523.83 \$532.23 00 \$8.40 \$539.08	\$8.40 \$36.13 \$44.70 \$58.40 \$36.13 \$44.53 \$44.53 \$8.40 \$2.10 \$37.04 \$2.10 \$39.08 \$116.73 \$165.35 \$263.38 \$98.03 \$598 *FIRE LINE \$62 \$44.70 \$64.15 \$00 \$162.57 \$170.97 \$268.00 \$378.23 \$455.88 \$77.65 \$21% *FIRE LINE \$62 \$64.15 \$65.25 \$10.00 \$123.48 \$77.65 \$21% \$167.30 \$	\$\frac{\\$\\$8.40}{\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$	\$\frac{\sec}{0}\$ \text{\$\frac{\sec}{344.70}} \text{\$\frac{\sec}{36.13}} \text{\$\frac{\sec}{36.13}} \text{\$\frac{\sec}{344.53}} \text{\$\frac{\sec}{34.453}} \text{\$\frac{\sec}{34.20}} \text{\$\frac{\sec}{36.10}} \text{\$\frac{\sec}{34.20}} \text{\$\frac{\sec}{34.20}} \text{\$\frac{\sec}{34.20}} \text{\$\frac{\sec}{34.20}} \text{\$\frac{\sec}{34.20}} \text{\$\frac{\sec}{34.76}} \text{\$\frac{\sec}{34.76}} \text{\$\frac{\sec}{34.76}} \text{\$\frac{\sec}{34.76}} \text{\$\frac{\sec}{34.70}} \text{\$\frac{\sec}{34.76}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{37.65}} \text{\$\frac{\sec}{34.76}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.70}} \text{\$\frac{\sec}{34.70}} \text{\$\frac{\sec}{34.70}} \text{\$\frac{\sec}{34.70}} \text{\$\frac{\sec}{34.70}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \text{\$\frac{\sec}{34.75}} \qua	\$\frac{\sec}{0}\$ \begin{array}{c ccccccccccccccccccccccccccccccccccc	\$\frac{\sec}{0}\$ \	\$\frac{\sigma}{0}\$ \begin{array}{c c c c c c c c c c c c c c c c c c c	\$\begin{array}{c c c c c c c c c c c c c c c c c c c

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 81. Scenario #5 - Sample Irrigation Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				IRRIG	ATION					
2" METER, 150 CCF/MONTH										
	<u>Use</u> 150	\$44.70	\$64.15	\$67.11	\$72.38	\$67.66	\$69.75	\$72.54	\$75.47	\$75.47
Tier 1		\$8.40								
Tier 2		\$252.88								
Subtotal Variable Charge		\$261.28	\$430.50	\$442.50	\$462.00	\$435.00	\$450.00	\$471.00	\$495.00	\$495.00
WAC Charge*	150	\$185.22	\$10.50	\$21.00	\$34.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$491.20	\$505.15	\$530.61	\$568.88	\$502.66	\$519.75	\$543.54	\$570.47	\$570.47
\$ Change			\$13.95	\$25.46	\$38.27	(\$66.22)	\$17.09	\$23.79	\$26.93	\$0.00
Percent Change			3%	5%	7%	-12%	3%	5%	5%	0%
2" METER, 300 CCF/MONTH										
	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$67.66	\$69.75	\$72.54	\$75.47	\$75.47
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		<u>\$523.83</u>								
Subtotal Variable Charge		\$532.23	\$861.00	\$885.00	\$924.00	\$870.00	\$900.00	\$942.00	\$990.00	\$990.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$947.36	\$946.15	\$994.11	\$1,065.38	\$937.66	\$969.75	\$1,014.54	\$1,065.47	\$1,065.47
\$ Change			(\$1.21)	\$47.96	\$71.27	(\$127.72)	\$32.09	\$44.79	\$50.93	\$0.00
Percent Change			0%	5%	7%	-12%	3%	5%	5%	0%
2" METER, 500 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$67.66	\$69.75	\$72.54	\$75.47	\$75.47
Variable Charge	500									
Tier 1		\$8.40								
Tier 2		<u>\$885.09</u>								
Subtotal Variable Charge		\$893.49	\$1,435.00	\$1,475.00	\$1,540.00	\$1,450.00	\$1,500.00	\$1,570.00	\$1,650.00	\$1,650.00
WAC Charge*	500	\$617.40	\$35.00	\$70.00	\$115.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$1,555.58	\$1,534.15	\$1,612.11	\$1,727.38	\$1,517.66	\$1,569.75	\$1,642.54	\$1,725.47	\$1,725.47
\$ Change			(\$21.43)	\$77.96	\$115.27	(\$209.72)	\$52.09	\$72.79	\$82.93	\$0.00
Percent Change			-1%	5%	7%	-12%	3%	5%	5%	0%

^{*} The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Scenario #5: Proposed Drought Rates

In response to the governor's declaration of a State water emergency and in anticipation of possible mandatory reductions, BWA developed drought rates based on the proposed potable and recycled rates developed in this study. The drought rates could be implemented during mandatory restriction declarations by the City Council. Using 2014/15 estimated total consumption as the base year, the proposed draft rates are based on four stages of curtailment, ranging from 20 to 50 percent of overall reduction. The draft rate is a charge per hcf for all water consumption. Tables 82 through 84 calculate the drought rates under Scenario #5.

Table 82. Scenario #5: Drought Rates - Projected Reduced Consumption Based on 2014/15 Consumption

		% of Curtailment Target	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment	t Target		0%	20%	30%	40%	50%
CURTAILME	ENT BY TIER						
Single-Fami	ily Residential						
Tier 1	0 - 6 hcf	75%	0.0%	-15.0%	-22.5%	-30.0%	-37.5%
Tier 2	6.1 - 12 hcf	100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Tier 3	12.1 - 25 hcf	115%	0.0%	-23.0%	-34.5%	-46.0%	-57.5%
Tier 4	Over 25 hcf	140%	0.0%	-28.0%	-42.0%	-56.0%	-70.0%
Multi-Famil	ly Residential						
Tier 1	0 - 5 hcf	75%	0.0%	-15.0%	-22.5%	-30.0%	-37.5%
Tier 2	Over 5 hcf	140%	0.0%	-28.0%	-42.0%	-56.0%	-70.0%
Commercia	I	100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Irrigation		100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
	ES WITH CURTAILM	ENT (HCF)					
Ŭ	ily Residential		2014/15 Proj. Use				
Tier 1	0 - 6 hcf		1,572,966	1,337,020	1,219,050	1,101,080	983,100
Tier 2	6.1 - 12 hcf		1,207,497	966,000	845,250	724,500	603,750
Tier 3	12.1 - 25 hcf		1,293,433	995,940	847,200	698,450	549,710
Tier 4	Over 25 hcf		<u>737,579</u>	<u>531,060</u>	<u>427,800</u>	<u>324,530</u>	<u>221,270</u>
Subtotal			4,811,475	3,830,020	3,339,300	2,848,560	2,357,830
% Reduction	n from Base Year		0.0%	-20.4%	-30.6%	-40.8%	-51.0%
Multi-Famil	ly Residential						
Tier 1	0 - 5 hcf		2,783,151	2,365,680	2,156,940	1,948,210	1,739,470
Tier 2	Over 5 hcf		1,621,057	1,167,160	940,210	713,270	486,320
Subtotal			4,404,208	3,532,840	3,097,150	2,661,480	2,225,790
% Reduction	n from Base Year		0.0%	-19.8%	-12.3%	-14.1%	-16.4%
Commercia	ı		2,252,448	1,801,960	1,576,710	1,351,470	1,126,220
% Reduction	n from Base Year		0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Irrigation			548,298	438,640	383,810	328,980	274,150
% Reduction	n from Base Year		0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Estimated 1	Total Water Sales		12,016,429	9,603,460	8,396,970	7,190,490	5,983,990
% Reduction	n from Base Year		0.0%	-20.1%	-30.1%	-40.2%	-50.2%

Table 83. Scenario #5: Drought Rates - Projected Reduced Revenues Based on Reduced Consumption

	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment Target	0%	20%	30%	40%	50%
ANNUAL WATER SALES (HCF)					
Single-Family Residential	2014/15 Proj. Use				
Tier 1	1,572,966	1,337,020	1,219,050	1,101,080	983,100
Tier 2					•
	1,207,497	966,000	845,250	724,500	603,750
Tier 3	1,293,433	995,940	847,200	698,450	549,710
Tier 4 Subtotal	<u>737,579</u> 4,811,475	<u>531,060</u> 3,830,020	<u>427,800</u> 3,339,300	<u>324,530</u> 2,848,560	<u>221,270</u> 2,357,830
Barriel Familia Davidantial					
Multi-Family Residential	2 = 22 4 = 4	2 2 2 5 2 2 2	2.455.040	4 0 4 0 0 4 0	4 =00 4=0
Tier 1	2,783,151	2,365,680	2,156,940	1,948,210	1,739,470
Tier 2	<u>1,621,057</u>	<u>1,167,160</u>	940,210	<u>713,270</u>	486,320
Subtotal	4,404,208	3,532,840	3,097,150	2,661,480	2,225,790
Commercial	2,252,448	1,801,960	1,576,710	1,351,470	1,126,220
Irrigation	548,298	438,640	383,810	328,980	274,150
Total Water Sales	12,016,429	9,603,460	8,396,970	7,190,490	5,983,990
VARIABLE RATES	Jul 1, 2014				
Single-Family Residential	Jul 1, 2014	301 1, 2014	301 1, 2014	301 1, 2014	301 1, 2014
Tier 1	¢2.27	\$2.27	ć2 27	ć2 27	¢2.27
	\$2.27	· ·	\$2.27	\$2.27	\$2.27
Tier 2	\$2.80	\$2.80	\$2.80	\$2.80	\$2.80
Tier 3	\$3.18	\$3.18	\$3.18	\$3.18	\$3.18
Tier 4	\$3.86	\$3.86	\$3.86	\$3.86	\$3.86
Multi-Family Residential					
Tier 1	\$2.38	\$2.38	\$2.38	\$2.38	\$2.38
Tier 2	\$3.52	\$3.52	\$3.52	\$3.52	\$3.52
Commercial	\$2.81	\$2.81	\$2.81	\$2.81	\$2.81
Irrigation	\$2.90	\$2.90	\$2.90	\$2.90	\$2.90
REVENUES WITH CURTAILMENT					
Single-Family Residential	40 === =:	40.0	40 =====	40.400	40.0
Tier 1	\$3,570,633	\$3,035,035	\$2,767,244	\$2,499,452	\$2,231,637
Tier 2	3,380,992	2,704,800	2,366,700	2,028,600	1,690,500
Tier 3	4,113,117	3,167,089	2,694,096	2,221,071	1,748,078
Tier 4	<u>2,847,055</u>	<u>2,049,892</u>	<u>1,651,308</u>	<u>1,252,686</u>	<u>854,102</u>
Subtotal	13,911,796	10,956,816	9,479,348	8,001,808	6,524,317
Multi-Family Residential					
Tier 1	\$6,623,899	\$5,630,318	\$5,133,517	\$4,636,740	\$4,139,939
Tier 2	5,706,121	4,108,403	3,309,539	2,510,710	<u>1,711,846</u>
Subtotal	12,330,020	9,738,722	8,443,056	7,147,450	5,851,785
Commercial	\$6,329,379	\$5,063,508	\$4,430,555	\$3,797,631	\$3,164,678
Irrigation	\$1,590,064	\$1,272,056	\$1,113,049	\$954,042	\$795,035
Total	\$34,161,259	\$27,031,101	\$23,466,008	\$19,900,931	\$16,335,815
Revenue Loss with Curtailment	\$0	\$7,130,158	\$10,695,251	\$14,260,328	\$17,825,444

Table 84. Scenario #5: Projected Drought Rates for 2014/15

	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment Target	0%	20%	30%	40%	50%
Water Sales Impact (hcf)					
Reduced Water Sales (hcf)	0	2,403,300	3,604,900	4,806,600	6,008,200
Water Sales with Curtailment (hcf)	12,016,429	9,613,129	8,411,529	7,209,829	6,008,229
Add'l Revenue Requirement					
Water Sales Revenue Loss	\$0	\$7,130,000	\$10,695,000	\$14,260,000	\$17,825,000
Reduced O&M	\$0	\$0	\$0	\$0	\$0
Add'l Conservation Program Costs	\$0	\$100,000	\$200,000	\$300,000	\$400,000
Total Add'l Revenue Requirement	\$0	\$7,230,000	\$10,895,000	\$14,560,000	\$18,225,000
DROUGHT CHARGE PER HCF		\$0.75	\$1.30	\$2.02	\$3.03

SECTION 13: RATE SCENARIO #6

At the May 13, 2014 City Council meeting, Councilmembers recommended a hybrid scenario that combined Scenario 1 (Base Scenario) and Scenario 5. The Council proposed Scenario 6 which includes four years of rate increases (5%, 4%, 4%, 4%) through 2017/18. Based on this scenario, the water utility will continue to operate in a negative cash balance through 2015/16. The cash balance at the end of 2018/19 is projected at approximately \$7.0 million.

Table 85. Scenario #6: 5-4-4-4 – Cash Flow Projection

	Projected			Five-Year Plan		
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Assumptions:						
Revenue Adjustment (Assumes 12 months of rate increases)		5.0%	4.0%	4.0%	4.0%	0.0%
Interest Earnings Rate	0.5%	0.3%	0.5%	0.5%	1.0%	1.0%
Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Operating Revenues - Charges for Services						
Potable Sales Based on 12 Months of Increases	\$44,517,200	\$46,977,000	\$48,586,000	\$50,782,000	\$53,077,000	\$53,342,000
Recycled Water Sales Based on 12 Months of Increases	1,955,000	2,063,000	2,133,000	2,229,000	2,330,000	2,342,000
Total Water Sales Based on 12 Months of Increases	46,472,200	49,040,000	50,719,000	53,011,000	55,407,000	55,684,000
Operating Revenues - Charges for Services						
Potable Sales	\$44,517,200	\$46,485,000	\$48,586,000	\$50,782,000	\$53,077,000	\$53,342,000
Recycled Sales	1,955,000	2,041,000	2,133,000	2,229,000	2,330,000	2,342,000
Fireline Credit	-	(3,400,000)	-	-	-	-
Total Retail Sales	46,472,200	45,126,000	50,719,000	53,011,000	55,407,000	55,684,000
Operating Expenses						
Production	25,045,200	24,092,800	25,186,600	26,096,500	27,455,500	28,405,200
Transmission and Distribution	10,663,200	11,369,400	12,394,700	12,633,500	13,058,600	13,582,500
Customer Services	2,797,200	2,750,000	2,819,300	2,903,700	2,990,700	3,080,500
Depreciation	5,403,600	5,254,500	5,825,000	6,350,000	6,875,000	7,400,000
Total Operating Expenses	43,909,200	43,466,700	46,225,600	47,983,700	50,379,800	52,468,200
Operating Income	2,563,000	1,659,300	4,493,400	5,027,300	5,027,200	3,215,800
New Operating Development Fundamen						
Non-Operating Revenues and Expenses Revenue from Customer Paid Projects	140,000	1,940,700	1,940,700	1,740,700	1,740,700	1,740,700
•	1,541,100			985,000	985,000	
Non-Operating Expanse (Interest Expanse)	(3,118,000)	1,435,000 (3,514,300)	985,000 (3,477,600)	(3,437,800)	(3,384,800)	985,000 (3,330,000)
Non-Operating Expense (Interest Expense) Total Non-operating Revenues, net	(1,436,900)	(138,600)	(551,900)	(712,100)	(659,100)	(604,300)
Net Income Before Transfers		1,520,700	3,941,500	4,315,200	4,368,100	2,611,500
	1,126,100	1,320,700	3,941,500	4,313,200	4,368,100	2,011,500
Gladys Drive Reimbursement Net Income (Loss)	1,000,000 126,100	1,520,700	3,941,500	4,315,200	4,368,100	2,611,500
Net Income (Loss)	120,100	1,320,700	3,341,300	4,313,200	4,308,100	2,011,300
Beginning Unrestricted Cash Reserves	(14,186,600)	(10,218,400)	(7,450,400)	(2,409,600)	1,139,062	4,705,724
Add Non Cash Expense - Depreciation	5,403,600	5,254,500	5,825,000	6,350,000	6,875,000	7,400,000
Net Unrestricted Cash Reserves	(\$8,783,000)	(4,963,900)	(1,625,400)	3,940,400	8,014,062	12,105,724
Add Net Income	126,100	1,520,700	3,941,500	4,315,200	4,368,100	2,611,500
Add Bond Proceeds	-	-	-	-	-	-
Less Bond Principal Payments - 2008 Bonds	(1,210,000)	(1,245,000)	(1,285,000)	(1,325,000)	(1,370,000)	(1,420,000)
Less Bond Principal Payments - 2012 Bonds	-	-	-	-	(415,000)	(435,000)
Less Capital Expenditures - Pay Go	(272,000)	(821,500)	(1,500,000)	(4,050,838)	(4,150,738)	(4,150,738)
Less Capital Expenditures - Customer Paid	(79,500)	(1,940,700)	(1,940,700)	(1,740,700)	(1,740,700)	(1,740,700)
Revenues Less Expenses	(1,435,400)	(2,486,500)	(784,200)	(2,801,338)	(3,308,338)	(5,134,938)
Ending Unrestricted Cash Reserves	(10,218,400)	(7,450,400)	(2,409,600)	1,139,062	4,705,724	6,970,786
Beginning Bond Proceeds	28,525,100	21,014,082	5,554,874	-	-	-
Bonds Proceeds	- (7 E11 010)	- (1E 4E0 300)	- (E EE 4 074)	-	-	-
Less Capital Expenditures - Bonds	(7,511,018)	(15,459,208)	(5,554,874)		-	-
Ending Bond Proceeds	21,014,082	5,554,874	÷	-	-	-
Debt Service Coverage - Min. 1.25	2.20	1.75	2.37	2.60	2.49	2.24
Debt Service Coverage Met	yes	yes	yes	yes	yes	yes
Minimum Cash Reserve Target	11,300,000	11,300,000	11,300,000	11,300,000	11,300,000	11,300,000
Cash Reserve Target Met	no	no	no	no	no	no

 $[\]ensuremath{\text{1}}$ - Revenues for 2014/15 have been adjusted for September 1, 2014 effective date.

Scenario #6: Proposed Rates

The following tables shows a 4-year schedule of proposed water rates for Scenario #6 incorporating a) the overall level of required rate increases to fund GWP's costs of providing service, b) the proposed rate structure adjustments, and c) the revenue recovery allocations that fairly apportion costs to all customers. The first rate adjustment will be effective September 1, 2014. Rate increases thereafter will be effective on July 1 of each year.

Table 86. Scenario #6: Proposed Potable Water Rates

MON	THLY WATE	R CUSTOME	R CHARGES			
	Current			Projected		
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$21.18	\$20.80	\$21.40	\$22.26	\$23.15	\$23.15
3/4"	\$24.83	\$26.39	\$27.15	\$28.25	\$29.37	\$29.37
1.0"	\$32.15	\$34.78	\$35.78	\$37.22	\$38.71	\$38.71
1.5"	\$50.43	\$57.15	\$58.79	\$61.16	\$63.60	\$63.60
2.0"	\$72.38	\$68.33	\$70.29	\$73.13	\$76.05	\$76.05
3.0"	\$123.58	\$236.09	\$242.85	\$252.65	\$262.77	\$262.77
4.0"	\$196.72	\$459.77	\$472.93	\$492.01	\$511.73	\$511.73
6.0"	\$379.59	\$851.21	\$875.57	\$910.89	\$947.41	\$947.41
8.0"	\$599.02	\$1,969.61	\$2,025.97	\$2,107.69	\$2,192.21	\$2,192.21
10.0"	\$855.03	\$3,088.01	\$3,176.37	\$3,304.49	\$3,437.01	\$3,437.01
12.0"	-	\$3,088.01	\$3,176.37	\$3,304.49	\$3,437.01	\$3,437.01

D	AILY WATER CUSTOMER CHA	ARGES (MONT	HLY CHARGE	(/30 DAYS)		
	Current			Projected		
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$0.71	\$0.69	\$0.71	\$0.74	\$0.77	\$0.77
3/4"	\$0.83	\$0.88	\$0.91	\$0.94	\$0.98	\$0.98
1.0"	\$1.07	\$1.16	\$1.19	\$1.24	\$1.29	\$1.29
1.5"	\$1.68	\$1.91	\$1.96	\$2.04	\$2.12	\$2.12
2.0"	\$2.41	\$2.28	\$2.34	\$2.44	\$2.54	\$2.54
3.0"	\$4.12	\$7.87	\$8.10	\$8.42	\$8.76	\$8.76
4.0"	\$6.56	\$15.33	\$15.76	\$16.40	\$17.06	\$17.06
6.0"	\$12.65	\$28.37	\$29.19	\$30.36	\$31.58	\$31.58
8.0"	\$19.97	\$65.65	\$67.53	\$70.26	\$73.07	\$73.07
10.0"	\$28.50	\$102.93	\$105.88	\$110.15	\$114.57	\$114.57
12.0"	-	\$102.93	\$105.88	\$110.15	\$114.57	\$114.57

	MONTHLY VARIABLE CHARGES - DOES NOT INCLUDE WATER ADJUSTMENT CHARGES										
			SINGLE FAIV	IILY RESIDENT	TAL						
	Current	Proposed	Current	nt Projected							
	Monthly Tiers	Monthly Tiers	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19			
Tier 1	0 - 6.26 hcf	0 - 6 hcf	\$1.72	\$2.31	\$2.39	\$2.49	\$2.61	\$2.61			
Tier 2	6.27 - 12.52 hcf	6.1 - 12 hcf	\$2.18	\$2.84	\$2.96	\$3.06	\$3.23	\$3.23			
Tier 3	12.53 - 31.03 hcf	12.1 - 25 hcf	\$3.18	\$3.22	\$3.37	\$3.47	\$3.67	\$3.67			
Tier 4	31.04 - 40.28 hcf	Over 25 hcf	\$3.54	\$3.90	\$4.11	\$4.21	\$4.46	\$4.46			
Tier 5	Over 40.28 hcf		\$4.13	-	-	-	-	-			

	MULTI- FAMILY RESIDENTIAL									
	Current	Proposed	Current (1)	rent (1) Projected						
	Monthly Tiers	Monthly Tiers	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
Tier 1	0 - 5.10 hcf	0 - 5 hcf	\$1.81	\$2.42	\$2.50	\$2.61	\$2.73	\$2.73		
Tier 2	5.11 - 10.20 hcf	Over 5 hcf	\$3.03	\$3.56	\$3.69	\$3.85	\$4.01	\$4.01		
Tier 3	Over 10.20 hcf		\$3.60	-	-	-	-	-		

COMMERCIAL								
	Current	Projected						
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
All Consumption per hcf	\$2.87	\$2.86	\$2.95	\$3.08	\$3.23	\$3.23		

IRRIGATION									
	Current	Projected							
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19			
All Consumption per hcf	\$3.08	\$2.95	\$3.05	\$3.20	\$3.35	\$3.35			

 $^{1 -} The \ tier \ breakpoints \ for \ multi-family \ customers \ are \ prorated \ based \ on \ the \ number \ of \ dwelling \ units \ for \ each \ account.$

Table 87. Scenario #6: Proposed Recycled Water Rates

	MONTHLY RECY	CLED WATER	CUSTOMER C	HARGE		
	Current			Projected		
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$15.89	\$17.68	\$18.19	\$18.92	\$19.68	\$19.68
3/4"	\$18.62	\$22.43	\$23.08	\$24.01	\$24.96	\$24.96
1.0"	\$24.11	\$29.56	\$30.41	\$31.64	\$32.90	\$32.90
1.5"	\$37.82	\$48.58	\$49.97	\$51.99	\$54.06	\$54.06
2.0"	\$54.29	\$58.08	\$59.75	\$62.16	\$64.64	\$64.64
3.0"	\$92.69	\$200.68	\$206.42	\$214.75	\$223.35	\$223.35
4.0"	\$147.54	\$390.80	\$401.99	\$418.21	\$434.97	\$434.97
6.0"	\$284.69	\$723.53	\$744.23	\$774.26	\$805.30	\$805.30
8.0"	\$449.27	\$1,674.17	\$1,722.07	\$1,791.54	\$1,863.38	\$1,863.38
10.0"	\$641.27	\$2,624.81	\$2,699.91	\$2,808.82	\$2,921.46	\$2,921.46
12.0"	-	\$2,624.81	\$2,699.91	\$2,808.82	\$2,921.46	\$2,921.46

	DAILY RECYCLED WATER CUS	TOMER CHARG	E (MONTHLY C	HARGE/30 DA	YS)	
	Current					
Meter Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
5/8"	\$0.53	\$0.59	\$0.61	\$0.63	\$0.66	\$0.66
3/4"	\$0.62	\$0.75	\$0.77	\$0.80	\$0.83	\$0.83
1.0"	\$0.80	\$0.99	\$1.01	\$1.05	\$1.10	\$1.10
1.5"	\$1.26	\$1.62	\$1.67	\$1.73	\$1.80	\$1.80
2.0"	\$1.81	\$1.94	\$1.99	\$2.07	\$2.15	\$2.15
3.0"	\$3.09	\$6.69	\$6.88	\$7.16	\$7.45	\$7.45
4.0"	\$4.92	\$13.03	\$13.40	\$13.94	\$14.50	\$14.50
6.0"	\$9.49	\$24.12	\$24.81	\$25.81	\$26.84	\$26.84
8.0"	\$14.98	\$55.81	\$57.40	\$59.72	\$62.11	\$62.11
10.0"	\$21.38	\$87.49	\$90.00	\$93.63	\$97.38	\$97.38
12.0"	-	\$87.49	\$90.00	\$93.63	\$97.38	\$97.38

MONTHLY RECYCLED WATER VARIABLE CHARGES								
COMMERCIAL RECYCLED WATER RATE								
	Current	Projected						
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
Water Variable Charge	\$2.1500 \$2.43 \$2.51 \$2.62 \$2.75 \$2.75							

IRRIGATION RECYCLED WATER RATE								
	Current	Projected						
	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19		
Water Variable Charge	\$2.3100 \$2.51 \$2.59 \$2.72 \$2.85 \$2.85							

^{1 -} Beginning in 2014/15, the recycled water customer charge and variable rates will be based on a 15% discount from the potable rates.

Table 88. Scenario #6: Proposed Private Fire Line Rates (1)

	М	ONTHLY PRIVATE FIRE LINI	E CUSTOMER	CHARGE					
	Current		Projected						
Fire Line Service Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19			
1" (2)	-	\$8.10	\$8.34	\$8.68	\$9.02	\$9.02			
1-1/2" (2)	-	\$8.96	\$9.23	\$9.61	\$9.99	\$9.99			
2.0"	\$13.4725	\$10.44	\$10.78	\$11.22	\$11.67	\$11.67			
3.0"	\$28.1415	\$15.74	\$16.32	\$17.00	\$17.68	\$17.68			
4.0"	\$202.37	\$24.89	\$25.88	\$26.97	\$28.05	\$28.05			
6.0"	\$395.98	\$57.74	\$60.19	\$62.73	\$65.28	\$65.28			
8.0"	\$633.96	\$114.39	\$119.36	\$124.42	\$129.49	\$129.49			
10.0"	\$917.86	\$199.61	\$208.36	\$217.21	\$226.07	\$226.07			
12.0" (2)	-	\$317.72	\$331.72	\$345.82	\$359.92	\$359.92			

D	AILY PRIVATE	FIRE LINE WATER CUSTOMER (CHARGE (MON	THLY CHARGE/	30 DAYS)					
	Current		Projected							
Fire Line Service Size	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19				
1" (2)	-	\$0.27	\$0.28	\$0.29	\$0.30	\$0.30				
1-1/2" (2)	-	\$0.30	\$0.31	\$0.32	\$0.33	\$0.33				
2.0"	\$0.45	\$0.35	\$0.36	\$0.37	\$0.39	\$0.39				
3.0"	\$0.94	\$0.52	\$0.54	\$0.57	\$0.59	\$0.59				
4.0"	\$6.75	\$0.83	\$0.86	\$0.90	\$0.94	\$0.94				
6.0"	\$13.20	\$1.92	\$2.01	\$2.09	\$2.18	\$2.18				
8.0"	\$21.13	\$3.81	\$3.98	\$4.15	\$4.32	\$4.32				
10.0"	\$30.60	\$6.65	\$6.95	\$7.24	\$7.54	\$7.54				
12.0" (2)	-	\$10.59	\$11.06	\$11.53	\$12.00	\$12.00				

MONTHLY PRIVATE FIRE VARIABLE CHARGES											
	Current	Proposed	Projected (3)								
Current Tiers	Jan 1, 2014	Tiers (3)	2014/15	2015/16	2016/17	2017/18	2018/19				
0 - 10 hcf	\$0.9204	All Use	\$2.86	\$2.95	\$3.08	\$3.23	\$3.23				
Over 10 hcf											

^{1 -} Private fire line rates for 4" service and larger were suspended in January 2014.

^{2 -} Currently has no rate

³ - Beginning in 2014/15, the variable charge for private fire lines will be equal to the potable commercial rate.

Scenario #6: Water Rate Impacts

The following tables show sample bill impacts for a selection of customer profiles for Scenario #6. The proposed revenue adjustments do not imply that each customer will receive the same percentage increase in their bill. The bill impacts will vary for each customer as a result of the proposed fixed meter charge adjustments, the proposed variable rate structure changes, and each individual customer's actual consumption levels. Note that water consumption, particularly for single family customers, typically varies from month to month due to seasonal variations in weather and/or other factors. Hence customers could face a range of impacts throughout the year depending on their level of water use in each billing period.

The sample bill impacts do not include any future WAC increases. The WAC is calculated twice a year and recovers any additional costs of water purchases and energy costs that exceed the annual budget. The WAC can either increase or decrease semi-annually and is based on the cost of purchased water from MWD and the cost of purchased energy for the previous 6 months.

Table 89. Scenario #6 - Sample Single Family Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				SINGLE FAMIL	LY RESIDENTIA	L				
3/4" METER, 10 CCF/MON	TH									
Fixed Charge	<u>Use</u>	\$15.66	\$21.97	\$23.01	\$24.83	\$26.39	\$27.15	\$28.25	\$29.37	\$29.37
Variable Charge	10	4	4	4	4	4				4
Tier 1		\$8.40	\$9.53	\$9.97	\$10.78	\$13.86	\$14.34	\$14.94	\$15.66	\$15.66
Tier 2		-	\$7.05	\$7.46	\$8.13	\$11.36	\$11.84	\$12.24	\$12.92	\$12.92
Tier 3 Tier 4		-	-	-	-	-	-	-	-	_
Tier 5			-	-		_	-	- -	_	_
Subtotal Variable Charge		\$8.40	\$16.58	\$17.43	\$18.92	\$25.22	\$26.18	\$27.18	\$28.58	\$28.58
WAC Charge*	10	\$12.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill	10	\$36.41	\$38.55	\$40.44	\$43.75	\$51.61	\$53.33	\$55.43	\$57.95	\$57.95
•		\$36.41	•	•			•		•	•
\$ Change			\$2.14	\$1.89	\$3.31	\$7.86	\$1.72	\$2.10	\$2.52	\$0.00
Percent Change			6%	5%	8%	18%	3%	4%	5%	0%
3/4" METER, 19 CCF/MON	тн									
Fixed Charge Variable Charge	<u>Use</u> 19	\$15.66	\$21.97	\$23.01	\$24.83	\$26.39	\$27.15	\$28.25	\$29.37	\$29.37
Tier 1		\$8.40	\$9.53	\$9.97	\$10.78	\$13.86	\$14.34	\$14.94	\$15.66	\$15.66
Tier 2		\$16.26	\$11.85	\$12.54	\$13.67	\$17.04	\$17.76	\$18.36	\$19.38	\$19.38
Tier 3		-	\$19.54	\$19.93	\$20.57	\$22.54	\$23.59	\$24.29	\$25.69	\$25.69
Tier 4		-	-	-	-	-	-	-	-	-
Tier 5		÷24.66	<u>-</u>	<u>-</u>	\$45.03	<u>=</u>	<u>-</u>		<u>-</u>	ćco 72
Subtotal Variable Charge		\$24.66	\$40.92	\$42.44		\$53.44	\$55.69	\$57.59	\$60.73	\$60.73
WAC Charge*	<u>19</u>	\$23.46	\$0.71	\$1.36	\$2.26	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$63.78	\$63.60	\$66.81	\$72.12	\$79.83	\$82.84	\$85.84	\$90.10	\$90.10
\$ Change			(\$0.17)	\$3.20	\$5.32	\$7.71	\$3.01	\$3.00	\$4.26	\$0.00
Percent Change			0%	5%	8%	11%	4%	4%	5%	0%
3/4" METER, 50 CCF/MON	тн									
Fixed Charge	Use	\$15.66	\$21.97	\$23.01	\$24.83	\$26.39	\$27.15	\$28.25	\$29.37	\$29.37
Variable Charge	50									
Tier 1		\$8.40	\$9.53	\$9.97	\$10.78	\$13.86	\$14.34	\$14.94	\$15.66	\$15.66
Tier 2		\$72.25	\$11.85	\$12.54	\$13.67	\$17.04	\$17.76	\$18.36	\$19.38	\$19.38
Tier 3		-	\$55.90	\$57.01	\$58.86	\$41.86	\$43.81	\$45.11	\$47.71	\$47.71
Tier 4		-	\$30.99	\$31.54	\$32.75	\$97.50	\$102.75	\$105.25	\$111.50	\$111.50
Tier 5		\$80.65	<u>\$37.38</u> \$145.65	<u>\$38.35</u> \$149.42	\$40.10	± \$170.26	± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ±	± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ±	<u>-</u> \$194.25	\$194.25
Subtotal Variable Charge WAC Charge*	50	\$61.74	\$145.65	\$149.42	\$156.16 \$13.88	\$170.26 \$0.00	\$178.66 \$0.00	\$183.66 \$0.00	\$194.25	\$194.25
_	<u> 50</u>									
Total Monthly Water Bill		\$158.05	\$171.93	\$180.87	\$194.87	\$196.65	\$205.81	\$211.91	\$223.62	\$223.62
\$ Change			\$13.89	\$8.93	\$14.00	\$1.78	\$9.16	\$6.10	\$11.71	\$0.00
Percent Change			9%	5%	8%	1%	5%	3%	6%	0%

^{*} The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 90. Scenario #6 - Sample Multi-Family Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				MULTI-FAMII	LY RESIDENTIA	L				
1" METER, 5 UNITS, 50 CCF	F/MONTH	ļ								
Fixed Charge	<u>Use</u>	\$15.66	\$28.46	\$29.79	\$32.15	\$34.78	\$35.78	\$37.22	\$38.71	\$38.71
Variable Charge	50									
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$60.50	\$62.50	\$65.25	\$68.25	\$68.25
Tier 2		\$72.25	\$71.39	\$72.37	\$74.08	\$89.00	\$92.25	\$96.25	\$100.25	\$100.25
Tier 3		=	<u>-</u>	<u> </u>	4=	<u> </u>	<u> </u>	ΞΞ	ΞΞ	
Subtotal Variable Charge		\$80.65	\$112.53	\$115.55	\$120.33	\$149.50	\$154.75	\$161.50	\$168.50	\$168.50
WAC Charge*	<u>50</u>	\$61.74	\$2.94	\$5.88	\$9.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$158.05	\$143.93	\$151.22	\$162.03	\$184.28	\$190.53	\$198.72	\$207.21	\$207.21
\$ Change			(\$14.12)	\$7.29	\$10.81	\$22.25	\$6.25	\$8.19	\$8.49	\$0.00
Percent Change			-9%	5%	7%	14%	3%	4%	4%	0%
1" METER, 5 UNITS, 70 CCF	F/MONTH									
Fixed Charge	Use	\$15.66	\$28.46	\$29.79	\$32.15	\$34.78	\$35.78	\$37.22	\$38.71	\$38.71
Variable Charge	70	7-2	7-0	7-2	,,,,,,,	******	7	*****	*****	*****
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$60.50	\$62.50	\$65.25	\$68.25	\$68.25
Tier 2		\$108.38	\$74.61	\$75.63	\$77.42	\$160.20	\$166.05	\$173.25	\$180.45	\$180.45
Tier 3		=	\$64.81	\$66.14	<u>\$68.22</u>	=	Ξ.	Ξ.	=	
Subtotal Variable Charge		\$116.78	\$180.55	\$184.94	\$191.88	\$220.70	\$228.55	\$238.50	\$248.70	\$248.70
WAC Charge*	70	\$86.44	\$5.33	\$10.67	\$17.34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$218.87	\$214.34	\$225.40	\$241.37	\$255.48	\$264.33	\$275.72	\$287.41	\$287.41
\$ Change			(\$4.53)	\$11.06	\$15.97	\$14.11	\$8.85	\$11.39	\$11.69	\$0.00
Percent Change			-2%	5%	7%	6%	3%	4%	4%	0%
1" METER, 5 UNITS, 100 CC	CE/MONT	Н								
Fixed Charge	Use	\$15.66	\$28.46	\$29.79	\$32.15	\$34.78	\$35.78	\$37.22	\$38.71	\$38.71
Variable Charge	100									
Tier 1		\$8.40	\$41.14	\$43.18	\$46.25	\$60.50	\$62.50	\$65.25	\$68.25	\$68.25
Tier 2		\$162.57	\$74.61	\$75.63	\$77.42	\$267.00	\$276.75	\$288.75	\$300.75	\$300.75
Tier 3		=	<u>\$167.41</u>	\$170.84	<u>\$176.22</u>	-	-	-	-	
Subtotal Variable Charge		\$170.97	\$283.15	\$289.64	\$299.88	\$327.50	\$339.25	\$354.00	\$369.00	\$369.00
WAC Charge*	100	\$123.48	\$8.93	\$17.87	\$29.04	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$310.10	\$320.54	\$337.30	\$361.07	\$362.28	\$375.03	\$391.22	\$407.71	\$407.71
\$ Change			\$10.44	\$16.76	\$23.77	\$1.21	\$12.75	\$16.19	\$16.49	\$0.00
Percent Change			3%	5%	7%	0%	4%	4%	4%	0%

 $^{^{\}ast}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 91. Scenario #6 - Sample Commercial Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				COM	/IERCIAL					
2" METER, 30 CCF/MONTH										
Fixed Charge Variable Charge	<u>Use</u> 30	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$73.13	\$76.05	\$76.05
Tier 1		\$8.40								
Tier 2		<u>\$36.13</u>								
Subtotal Variable Charge		\$44.53	\$80.40	\$82.50	\$86.10	\$85.80	\$88.50	\$92.40	\$96.90	\$96.90
WAC Charge*	30	\$37.04	\$2.10	\$4.20	\$6.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$126.27	\$146.65	\$153.81	\$165.38	\$154.13	\$158.79	\$165.53	\$172.95	\$172.95
\$ Change			\$20.38	\$7.16	\$11.57	(\$11.25)	\$4.66	\$6.74	\$7.42	\$0.00
Percent Change			16%	5%	8%	-7%	3%	4%	4%	0%
2" METER, 100 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$73.13	\$76.05	\$76.05
Variable Charge	100									
Tier 1		\$8.40								
Tier 2		\$162.57								
Subtotal Variable Charge		\$170.97	\$268.00	\$275.00	\$287.00	\$286.00	\$295.00	\$308.00	\$323.00	\$323.00
WAC Charge*	100	\$123.48	\$7.00	\$14.00	\$23.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$339.14	\$339.15	\$356.11	\$382.38	\$354.33	\$365.29	\$381.13	\$399.05	\$399.05
\$ Change			\$0.01	\$16.96	\$26.27	(\$28.05)	\$10.96	\$15.84	\$17.92	\$0.00
Percent Change			0%	5%	7%	-7%	3%	4%	5%	0%
2" METER, 300 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$73.13	\$76.05	\$76.05
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		\$523.83								
Subtotal Variable Charge		\$532.23	\$804.00	\$825.00	\$861.00	\$858.00	\$885.00	\$924.00	\$969.00	\$969.00
WAC Charge*	<u>300</u>	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$947.36	\$889.15	\$934.11	\$1,002.38	\$926.33	\$955.29	\$997.13	\$1,045.05	\$1,045.05
\$ Change			(\$58.21)	\$44.96	\$68.27	(\$76.05)	\$28.96	\$41.84	\$47.92	\$0.00
Percent Change			-6%	5%	7%	-8%	3%	4%	5%	0%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 92. Scenario #6 - Sample Commercial with Fire Line Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				COMMERCIA	L WITH FIRE L	INE				
2" METER, 30 CCF/MONTH,	4" FIRE	LINE								
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$73.13	\$76.05	\$76.05
Variable Charge	30									
Tier 1		\$8.40								
Tier 2		\$36.13								
Subtotal Variable Charge		\$44.53	\$80.40	\$82.50	\$86.10	\$85.80	\$88.50	\$92.40	\$96.90	\$96.90
WAC Charge*	<u>30</u>	\$37.04	\$2.10	\$4.20	\$6.90	<u>\$0.00</u>	\$0.00	\$0.00	\$0.00	\$0.00
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$24.89	\$25.88	\$26.97	\$28.05	\$28.05
Total Monthly Water Bill		\$165.35	\$263.38	\$341.46	\$367.75	\$179.02	\$184.67	\$192.50	\$201.00	\$201.00
\$ Change			\$98.03	\$78.08	\$26.29	(\$188.73)	\$5.65	\$7.83	\$8.50	\$0.00
Percent Change			59%	30%	8%	-51%	3%	4%	4%	0%
2" METER, 100 CCF/MONTH	I, 4" FIRE	LINE								
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$73.13	\$76.05	\$76.05
Variable Charge	100									
Tier 1		\$8.40								
Tier 2		\$162.57								
Subtotal Variable Charge		\$170.97	\$268.00	\$275.00	\$287.00	\$286.00	\$295.00	\$308.00	\$323.00	\$323.00
WAC Charge*	<u>100</u>	\$123.48	\$7.00	\$14.00	\$23.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$24.89	\$25.88	\$26.97	\$28.05	\$28.05
Total Monthly Water Bill		\$378.23	\$455.88	\$543.76	\$584.75	\$379.22	\$391.17	\$408.10	\$427.10	\$427.10
\$ Change			\$77.65	\$87.88	\$40.99	(\$205.53)	\$11.95	\$16.93	\$19.00	\$0.00
Percent Change			21%	19%	8%	-35%	3%	4%	5%	0%
2" METER, 300 CCF/MONTH	I, 4" FIRE	LINE								
Fixed Charge	<u>Use</u>	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$73.13	\$76.05	\$76.05
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		<u>\$523.83</u>								
Subtotal Variable Charge		\$532.23	\$804.00	\$825.00	\$861.00	\$858.00	\$885.00	\$924.00	\$969.00	\$969.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fire Line		\$39.08	\$116.73	\$187.65	\$202.37	\$24.89	\$25.88	\$26.97	\$28.05	\$28.05
Total Monthly Water Bill		\$986.45	\$1,005.88	\$1,121.76	\$1,204.75	\$951.22	\$981.17	\$1,024.10	\$1,073.10	\$1,073.10
\$ Change			\$19.43	\$115.88	\$82.99	(\$253.53)	\$29.95	\$42.93	\$49.00	\$0.00
Percent Change			2%	12%	7%	-21%	3%	4%	5%	0%

 $^{^{*}}$ The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Table 93. Scenario #6 - Sample Irrigation Bill Impacts*

			Actual		Current			Projected		
		Dec 15, 2010	Apr 27, 2012	Jan 1, 2013	Jan 1, 2014	2014/15	2015/16	2016/17	2017/18	2018/19
				IRRIG	ATION					
2" METER, 150 CCF/MONTH										
Fixed Charge	<u>Use</u>	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$73.13	\$76.05	\$76.05
Variable Charge	150	40.40								
Tier 1		\$8.40								
Tier 2		\$252.88	\$430.50	\$442.50	\$462.00	Ć442 F0	¢457.50	\$480.00	ć502.50	¢502.50
Subtotal Variable Charge		\$261.28				\$442.50	\$457.50		\$502.50	\$502.50
WAC Charge*	150	\$185.22	\$10.50	\$21.00	\$34.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$491.20	\$505.15	\$530.61	\$568.88	\$510.83	\$527.79	\$553.13	\$578.55	\$578.55
\$ Change			\$13.95	\$25.46	\$38.27	(\$58.05)	\$16.96	\$25.34	\$25.42	\$0.00
Percent Change			3%	5%	7%	-10%	3%	5%	5%	0%
2" METER, 300 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$73.13	\$76.05	\$76.05
Variable Charge	300									
Tier 1		\$8.40								
Tier 2		<u>\$523.83</u>								
Subtotal Variable Charge		\$532.23	\$861.00	\$885.00	\$924.00	\$885.00	\$915.00	\$960.00	\$1,005.00	\$1,005.00
WAC Charge*	300	\$370.44	\$21.00	\$42.00	\$69.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$947.36	\$946.15	\$994.11	\$1,065.38	\$953.33	\$985.29	\$1,033.13	\$1,081.05	\$1,081.05
\$ Change			(\$1.21)	\$47.96	\$71.27	(\$112.05)	\$31.96	\$47.84	\$47.92	\$0.00
Percent Change			0%	5%	7%	-11%	3%	5%	5%	0%
2" METER, 500 CCF/MONTH										
Fixed Charge	Use	\$44.70	\$64.15	\$67.11	\$72.38	\$68.33	\$70.29	\$73.13	\$76.05	\$76.05
Variable Charge	500									
Tier 1		\$8.40								
Tier 2		\$885.09								
Subtotal Variable Charge		\$893.49	\$1,435.00	\$1,475.00	\$1,540.00	\$1,475.00	\$1,525.00	\$1,600.00	\$1,675.00	\$1,675.00
WAC Charge*	500	\$617.40	\$35.00	\$70.00	\$115.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Monthly Water Bill		\$1,555.58	\$1,534.15	\$1,612.11	\$1,727.38	\$1,543.33	\$1,595.29	\$1,673.13	\$1,751.05	\$1,751.05
\$ Change			(\$21.43)	\$77.96	\$115.27	(\$184.05)	\$51.96	\$77.84	\$77.92	\$0.00
Percent Change			-1%	5%	7%	-11%	3%	5%	5%	0%

^{*} The sample bill impacts for 2014/15 through 2018/19 do not include any WAC increases which are currently unknown.

Scenario #6: Proposed Drought Rates

In response to the governor's declaration of a State water emergency and in anticipation of possible mandatory reductions, BWA developed drought rates based on the proposed potable and recycled rates developed in this study. The drought rates could be implemented during mandatory restriction declarations by the City Council. Using 2014/15 estimated total consumption as the base year, the proposed draft rates are based on four stages of curtailment, ranging from 20 to 50 percent of overall reduction. The draft rate is a charge per hcf for all water consumption. Tables 94 through 96 calculate the drought rates under Scenario #6.

Table 94. Scenario #6: Drought Rates - Projected Reduced Consumption Based on 2014/15 Consumption

		% of Curtailment Target	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment	Target		0%	20%	30%	40%	50%
CURTAILME	NT BY TIER ly Residential						
Tier 1	0 - 6 hcf	75%	0.0%	-15.0%	-22.5%	-30.0%	-37.5%
Tier 2	6.1 - 12 hcf	100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Tier 3	12.1 - 25 hcf	115%	0.0%	-23.0%	-34.5%	-46.0%	-57.5%
Tier 4	Over 25 hcf	140%	0.0%	-28.0%	-42.0%	-56.0%	-70.0%
Multi-Family	y Residential						·
Tier 1	0 - 5 hcf	75%	0.0%	-15.0%	-22.5%	-30.0%	-37.5%
Tier 2	Over 5 hcf	140%	0.0%	-28.0%	-42.0%	-56.0%	-70.0%
Commercial	I	100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Irrigation		100%	0.0%	-20.0%	-30.0%	-40.0%	-50.0%
WATER SAL	ES WITH CURTAILM	IENT (HCF)					
	ly Residential	` '	2014/15 Proj. Use				
Tier 1	0 - 6 hcf		1,569,829	1,334,350	1,216,620	1,098,880	981,140
Tier 2	6.1 - 12 hcf		1,202,672	962,140	841,870	721,600	601,340
Tier 3	12.1 - 25 hcf		1,283,054	987,950	840,400	692,850	545,300
Tier 4	Over 25 hcf		731,661	526,800	424,360	321,930	219,500
Subtotal			4,787,216	3,811,240	3,323,250	2,835,260	2,347,280
% Reduction	from Base Year		0.0%	-20.4%	-30.6%	-40.8%	-51.0%
Multi-Family	y Residential						·
Tier 1	0 - 5 hcf		2,777,601	2,360,960	2,152,640	1,944,320	1,736,000
Tier 2	Over 5 hcf		1,611,321	1,160,150	934,570	708,980	483,400
Subtotal			4,388,922	3,521,110	3,087,210	2,653,300	2,219,400
% Reduction	from Base Year		0.0%	-19.8%	-12.3%	-14.1%	-16.4%
Commercial	I		2,243,447	1,794,760	1,570,410	1,346,070	1,121,720
% Reduction	from Base Year		0.0%	-20.0%	-30.0%	-40.0%	-50.0%
Irrigation			543,876	435,100	380,710	326,330	271,940
% Reduction	from Base Year		0.0%	-20.0%	-30.0%	-40.0%	-50.0%
	otal Water Sales		11,963,461	9,562,210	8,361,580	7,160,960	5,960,340
% Reduction	from Base Year		0.0%	-20.1%	-30.1%	-40.1%	-50.2%

Table 95. Scenario #6: Drought Rates - Projected Reduced Revenues Based on Reduced Consumption

Curtailment Target ANNUAL WATER SALES (HCF) Single-Family Residential Tier 1 Tier 2 Tier 3	0% 2014/15 Proj. Use 1,569,829	20%	30%	40%	
ANNUAL WATER SALES (HCF) Single-Family Residential Tier 1 Tier 2	2014/15 Proj. Use	20%	30%	40/0	
Single-Family Residential Tier 1 Tier 2	·			* *	50%
Single-Family Residential Tier 1 Tier 2	·				1
Tier 1 Tier 2	·				1
Tier 2	1,505,025	1,334,350	1,216,620	1,098,880	981,140
	1,202,672	962,140	841,870	721,600	601,340
	1,283,054	987,950	840,400	692,850	545,300
Tier 4	731,661	526,800	424,360	321,930	219,500
Subtotal	4,787,216	3,811,240	3,323,250	2,835,260	2,347,280
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Multi-Family Residential					ì
Tier 1	2,777,601	2,360,960	2,152,640	1,944,320	1,736,000
Tier 2	1,611,321	<u>1,160,150</u>	934,570	708,980	483,400
Subtotal	4,388,922	3,521,110	3,087,210	2,653,300	2,219,400
Justicia.	1,555,522	3,321,110	5,557,215	2,000,000	
Commercial	2,243,447	1,794,760	1,570,410	1,346,070	1,121,720
Irrigation	543,876	435,100	380,710	326,330	271,940
Total Water Sales	11,963,461	9,562,210	8,361,580	7,160,960	5,960,340
VARIABLE RATES	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014	Jul 1, 2014
Single-Family Residential					
Tier 1	\$2.31	\$2.31	\$2.31	\$2.31	\$2.31
Tier 2	\$2.84	\$2.84	\$2.84	\$2.84	\$2.84
Tier 3	\$3.22	\$3.22	\$3.22	\$3.22	\$3.22
Tier 4	\$3.90	\$3.90	\$3.90	\$3.90	\$3.90
Multi-Family Residential					
Tier 1	\$2.42	\$2.42	\$2.42	\$2.42	\$2.42
Tier 2	\$3.56	\$3.56	\$3.56	\$3.56	\$3.56
Commercial	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86
Irrigation	\$2.95	\$2.95	\$2.95	\$2.95	\$2.95
DEVENUES WITH CURTAINAGENT					
REVENUES WITH CURTAILMENT					
Single-Family Residential	¢2.525.20E	¢2.002.240	¢2.040.202	ć2 F20 442	¢2.255.422
Tier 1	\$3,626,305	\$3,082,349	\$2,810,392	\$2,538,413	\$2,266,433
Tier 2	3,415,588	2,732,478	2,390,911	2,049,344	1,707,806
Tier 3	4,131,434	3,181,199	2,706,088	2,230,977	1,755,866
Tier 4	<u>2,853,478</u>	<u>2,054,520</u>	<u>1,655,004</u>	<u>1,255,527</u>	<u>856,050</u>
Subtotal	14,026,805	11,050,545	9,562,395	8,074,261	6,586,155
Multi-Family Residential					,
Tier 1	\$6,721,794	\$5,713,523	\$5,209,389	\$4,705,254	\$4,201,120
Tier 2	5,736,303	4,130,134	3,327,069	2,523,969	1,720,904
Subtotal	12,458,097	9,843,657	8,536,458	7,229,223	5,922,024
Commercial	\$6,416,258	\$5,133,014	\$4,491,373	\$3,849,760	\$3,208,119
Irrigation	\$1,604,434	\$1,283,545	\$1,123,095	\$962,674	\$802,223
Total	\$34,505,595	\$27,310,761	\$23,713,320	\$20,115,918	\$16,518,521
Revenue Loss with Curtailment	\$0	\$7,194,834	\$10,792,275	\$14,389,677	\$17,987,074

Table 96. Scenario #6: Projected Drought Rates for 2014/15

	Base Assumptions	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment Target	0%	20%	30%	40%	50%
Water Sales Impact (hcf) Reduced Water Sales (hcf) Water Sales with Curtailment (hcf)	0 11,963,461	2,392,700 9,570,761	3,589,000 8,374,461		5,981,700 5,981,761
Add'l Revenue Requirement Water Sales Revenue Loss Reduced O&M Add'l Conservation Program Costs Total Add'l Revenue Requirement	\$0 \$0 <u>\$0</u> \$0	\$7,195,000 \$0 <u>\$100,000</u> \$7,295,000	\$10,792,000 \$0 <u>\$200,000</u> \$10,992,000	\$0 <u>\$300,000</u>	\$17,987,000 \$0 <u>\$400,000</u> \$18,387,000
DROUGHT CHARGE PER HCF		\$0.76	\$1.31	\$2.05	\$3.07